



Qay ~~185~~ 176











M E D I C A L  
C O M M E N T A R I E S

FOR THE YEAR M.DCC.XCIV.

EXHIBITING A CONCISE VIEW OF THE  
LATEST AND MOST IMPORTANT DISCOVERIES  
IN MEDICINE AND MEDICAL PHILOSOPHY,

COLLECTED AND PUBLISHED BY  
ANDREW DUNCAN, M.D.F.R.&A.SS.ED.

PHYSICIAN TO HIS ROYAL HIGHNESS THE PRINCE OF WALES  
FOR SCOTLAND,  
FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, EDINBURGH,  
MEMBER OF THE ROYAL SOCIETIES OF MEDICINE  
OF PARIS, COPENHAGEN, EDINBURGH, ETC.  
AND PROFESSOR OF THE INSTITUTIONS OF MEDICINE  
IN THE UNIVERSITY OF EDINBURGH.

---

*Neglecta reducit, sparsa colligit, utilia seligit, necessaria ostendit, sic utile.*  
Baglivius.

---

DECADE SECOND.

VOL. IX.

---

EDINBURGH:

PRINTED FOR G. MUDIE, EDINBURGH;

AND

G. G. & J. ROBINSON, & J. JOHNSON, LONDON.

---

M.DCC.XCV.



TO

ABBE SPALLANZANI,

PROFESSOR OF NATURAL HISTORY

In the UNIVERSITY of PAVIA.

By whose Industry and Ingenuity in Experiment,

Many Particulars in the Animal Economy

Have been successfully elucidated,

THIS VOLUME OF

MEDICAL COMMENTARIES

Is respectfully inscribed,

By his most obedient Servant,

ANDREW DUNCAN

*Hæc enim est sapientia, in naturam converti et eo restitui  
unde publicus error expulerit.*

SENECA.



THE  
JOURNAL OF  
THE  
AMERICAN MEDICAL ASSOCIATION  
PUBLISHED WEEKLY  
CHICAGO, ILL., U.S.A.

Volume 10, No. 1, January 1917  
Published by the American Medical Association, 535 North Dearborn Street, Chicago, Ill.  
Subscription price, \$5.00 per annum in advance.  
Single copies, 15 cents.  
Entered as Second-Class Matter, June 26, 1911, Post Office at Chicago, Ill., under No. 102,362.  
Acceptance for mailing at special rate of postage provided for in Act of October 3, 1917, authorized on July 1, 1918.  
Postage paid at Chicago, Ill.  
Copyright, 1917, by American Medical Association  
Printed at the Chicago Press and Publishing Co., Chicago, Ill.

---

## *P R E F A C E.*

---

**I**N the volume which we now present to the Public, as well as in former volumes, besides an abridged view of ingenious and valuable productions, for which we have lately been indebted to eminent medical writers both at home and abroad, the reader will find many original essays well meriting his attention. Without descending to every particular, we may content ourselves with pointing out the essay on the effects of variolous infection on pregnant women, and the account of the *Bignonia Ophthalmica*, employed by the Arrowawk Indians in South America against inflammation of the eyes, as conveying

to every attentive and discerning reader information equally new and important.

WHILE the former demonstrates how far attentive experiments at home, respecting subjects already familiar to us, will afford a foundation of curious and interesting speculation, the latter may lead us to believe, that the country to which we are indebted for the Peruvian bark has other treasures in store, by which the healing art may be enriched, and with which we have hitherto been unacquainted.

WE do not, however, entertain any idea, that the Akuferunee of the Arrowwawks will ever, in point of importance, bear any comparison with the Quinquina of the Indians of Cajamuna. But if it shall be found as efficacious in Europe as it is in Demarary, the introduction

roduction of this hitherto non-descript vegetable into practice, will contribute not a little to the alleviation of human misery.

Several of our foreign correspondents, to whom we have already been indebted for valuable communications, find it a much more difficult matter to obtain a proper channel for transmitting their papers to Edinburgh than to London. But as some inconvenience has arisen from their being sent to us through the medium of our booksellers, we have made application to a valuable medical friend in London, who has agreed to take the trouble of forwarding them. By his means we have reason to hope, that they will afterwards be conveyed to us by the most safe, as well as the most expeditious channel.



FUTURE communications, therefore, intended for these Commentaries, which cannot with ease be directly transmitted to Dr Duncan at Edinburgh, may be addressed to the care of Dr George Pearson, Physician, Leicester-Square, London.

EDINBURGH, }  
DEC. 1. 1794. }

CON-



# C O N T E N T S.

O F

V O L. IX.

## DECADE SECOND.

---

### Sect. I. ACCOUNT of BOOKS.

	PAGE
I. Reil, Jo. Christ. M. D. Memorabilium clinicorum medico-practicorum. Vol.I.	17
II. Monro, Alexander, M. D. Experiments on the Nervous System, with the view of determining the nature of Animal Electricity	38
III. Saunders, William, M. D. A treatise on the structure, economy, and diseases of the Liver, together with an inquiry into the properties of Bile	51

IV.

IV. Arnold, Thomas, M. D. A case of Hydrophobia successfully treated - 74

V. Jackson, S. H. Dermato-pathologia, or practical observations on the diseases of the Skin, and its emanations 95

VI. Moncrieff, John. Inquiry into the medicinal qualities and effects of aerated alkaline water - - 105

VII. Baillie, Mathew, M. D. The Morbid Anatomy of some of the most important parts of the Human Body 115

VIII. Transactions of the College of Physicians of Philadelphia. Vol. I. - 134

IX. Humpage, Benjamin. Physiological researches into the most important parts of the Animal Economy - 175

X. Richter, Aug. Gott. M. D. Medical and Surgical observations - 197

Sect. II. MEDICAL OBSERVATIONS.

PAGE

- I. Of the effects of the Variolous Infection  
on Pregnant Women. By George  
Pearson, M. D. F. R. S. Physician  
to St George's Hospital - 213
- II. A Cancer-like case of the Uterus cured by  
a course of mercurial antimonial  
pills. By Mr Robert Bishoprick,  
surgeon, York - 257
- III. An account of the effects of an over-dose  
of the Terra Ponderosa Muriata.  
Communicated to Dr Fowler, by  
Mr A. Mather, surgeon, York 265
- IV. An account of the effects of Compression  
by the Tourniquet, in stopping the  
cold fit of Intermittents. Commu-  
nicated to Mr George Kellie, sur-  
geon in Leith, in a letter from his  
son, Mr George Kellie, surgeon on  
board his Majesty's ship the Iris - 271
- V. Observations on the Kuritscha Slepota, or  
Hen-blindness of Russia. Commu-  
nicated to Dr Duncan, in a letter  
from

	PAGE
from Dr Mathew Guthrie, physician at St Petersburg - - -	284
VI. Account of the Arabian mode of curing Fractured Limbs. Communicated to Dr Guthrie of Petersburg, by Mr Eaton, formerly Consul at Bas- fora - - -	292
VII. History of a case with many Anomalous Symptoms, apparently arising from Bile, successfully treated with Mer- cury. By Dr Oliver Martyn, phy- sician, Galway - - -	298
VIII. Account of the pernicious effects from an Impregnation given to Water by Lead. Communicated to Dr Dun- can, in a letter from A. B., fur- geon . - -	313
IX. Account of a singular case in Midwifery. By Mr William Rait, surgeon, Dun- dee - - -	319
X. History of the Case of a Puer Cœrulea- tus which was observed at Glasgow. Communicated to Dr Duncan, by Dr William Nevin, from Down- patrick, Ireland - - -	325



XI. Account of a singular periodical discharge of Blood from the Urethra terminating successfully. Communicated to Dr Duncan, by Mr Charles Stewart, surgeon at Archangel - - - 332

XII. Account of the effects of a solution of Arsenic in the cure of Intermittent Fever. Communicated in a letter to Dr Duncan, by Dr Thomas Fowler, physician, York. - - - 337

XIII. History of a Tetanic Affection terminating favourably. By Mr William Ellis, surgeon, Jamaica - - - 341

SECT.



## SECT. III. MEDICAL NEWS.

	PAGE
Information respecting the Yellow Fever which raged at Philadelphia -	344
Letter from Dr Chisholm, giving an account of a Specific for Ophthalmia, em- ployed by the Arrowawk Indians	365
Observations on Hospital Duties, addressed to the Officers and Trustees of the In- firmery at Liverpool, by the Rev. Mr Percival - -	374
Extract from the records of the Royal Medi- cal Society of Ednburgh, with some observations on Urinary Calculi. By Dr A. P. Wilfon - -	396
Account of the Yellow Peruvian Bark -	404
Account of the Swietenia Febrifuga, or Soy- mida - -	405
Plan for a Sea-Bathing Infirmary at Margate	406
Proposal for a Pneumatic Institution for deter- mining the effects of elastic fluids in various diseases - -	409

Notice

# CONTENTS.

xv

PAGE

Notice of intended Publications on medical  
subjects - - - 410

Accounts of the death of distinguished medical  
practitioners - - - 413

Account of medical promotions - 417

Account of the state of the thermometer,  
barometer, and rain, at London and  
Edinburgh, during the year 1793 418

Sect. IV. List of New Books - 420

MEDL



M E D I C A L  
C O M M E N T A R I E S,

FOR THE YEAR 1794.

VOL. IX. DECADE II.

---

S E C T. I.

*Account of New Books.*

---

I.

Joannis Christiani Reil, *Med. & Chir. Doct.*  
*Prof. Therap. P. O. Direct. Schol. Clin.*  
*Civ. Hal. Memorabilium Clinicorum Medico-*  
*Practicorum. Vol. I. Fascic. I. 8vo, Halæ.*

**T**HE volume now before us is the result of observations made in actual practice in a well regulated hospital by an eminent Physician. The first subject of which he treats is an epidemic Nervous fever, which appeared about the end of October.

VOL. IX. DEC. II.

B

1787.



1787, and, during the course of the winter, was gradually multiplied.

This disease, from the commencement, was peculiarly marked by putrid symptoms. It attacked many of the more robust in the most sudden manner; and very few, even of the weakest, had warnings of its approach. But among some of the latter, lassitude, a flow belly, a bitter taste in the mouth, nausea and vomiting, were observed for a week or two before the attack.

This fever very commonly began with a sense of coldness, but to a moderate degree only, and succeeded by heat little different from the natural, and which was sometimes interrupted by a return of horripilation. The heat was accompanied by pungent flying pains of the head, by uncommon watchfulness or drowsiness, and by wandering rheumatic pains affecting different parts of the body. Often, in the beginning, there were symptoms so far of an inflammatory appearance, as to induce practitioners to have recourse to blood-letting. But this was attended with the worst consequences. For the



the sudden loss of strength which followed, demonstrated the malignancy of the fever.

The pulse with the more robust patients, was, from the commencement of the disease, oppressed; with the weak, small and soft, and not unfrequently even slower than natural. But in every case it was very variable.

With a variety of the other symptoms commonly occurring in fevers, it may be remarked as a singularity, that in almost every case, there was a large mucous discharge from the glands of the fauces, œsophagus and larynx. Dr Reil sometimes observed so great a quantity of this, as even to threaten suffocation, leading an inattentive practitioner to suppose that there existed a violent catarrhal affection. In some few cases, however, there appeared to be a mucous discharge from the lungs themselves in great quantity. And instances also occurred where a similar affection seemed to take place in the intestinal canal. For, with severe gripes, large quantities of fetid mucus resembling pus, were discharged by stool.

In but few instances were the patients much affected with thirst. In the progress

of the disease the pulse became soft, small, and unequal, attended with great loss of strength, delirium, and various dangerous symptoms, indicating a particular affection of the nervous system, especially spasms, both of the tonic and clonic kind, either universal or topical. Sometimes they were observed to affect a leg, an arm, the tongue, the lips, or the muscles of any particular part. Sometimes they appeared under the form of catapelsy, epilepsy, or universal tetanus. Nor did the muscles appropriated to respiration remain free. From spasmodic affections of these, distressing difficulty of breathing, imitating peripneumony, was often produced. It was, however, readily distinguished by the absence of those symptoms which indicate inflammation.

In some instances patients remained perfectly distinct, the mental faculties seeming to be unimpaired. But more frequently delirium took place, which was commonly of the mild and melancholic kind: sometimes, however, there occurred furious delirium, in which cases there was reason to believe, that

that either inflammation or suppuration had taken place in the brain.

Miliary eruptions, generally of a white, but sometimes of a red colour, attended with a weak and unequal pulse, great oppression, difficulty of breathing, and convulsions, frequently appeared about the height of the disease. Petechiæ were rarely seen, and when they were seen, it was either in the beginning of the disease, if there were marks of putrid fomes in the primæ viæ, or in the end of the affection, a short time before death, when viscid cold sweats took place.

The appearance of the urine was much varied. In some cases it continued throughout to be limpid, particularly in those affected with severe spasms. In others it was turbid, depositing a lateritious sediment, from which, however, no certain prognosis could be drawn. The stools, in the beginning of the disease, were always highly fetid; and often continued so during the whole course of it. But in cases terminating favourably towards the end of the disease, they became,



though frequent, yet in other respects natural.

The inconstancy of heat in this fever was very remarkable. Not only were heat and cold frequently alternated, but various partial affections often took place; the trunk being warm, when the extremities were cold; the heat of the points of the fingers much increased, while that on the backs of the hands was much diminished; and the cheeks affected with a sense of burning, when not only the tips of the ears and nose were very cold, but a cold sweat also covered the forehead.

In those with whom the disease terminated fatally, all the symptoms were increased in violence; and particularly, there took place an involuntary discharge by stool, urine and tears, subfultus tendinum, singultus, fetid sweats, and sudden collapse of the features.

Upon the dissection of those dying of this fever, the coats of the omentum, mesentery, stomach, and intestines, particularly the jejunum, had all their small vessels so filled with blood as to resemble scarlet clots. In  
other

other dissections, the whole surface of the lungs, to the depth of several lines, seemed to be in a corrupted state, with large black sphacelated spots on different places. In some instances, there were even considerable solutions of continuity in the coats both of the stomach and intestines. Of these lesions, however, no marks appeared during the life of the patient ; so that there was reason to believe that they had occurred very suddenly, and perhaps even after death.

Though the appearances above described, as the attendants of this nervous fever, differed in many particulars from the putrid fevers which Dr Reil had before observed, in the one, the crasis of the blood appearing to be much altered, in the other, the nervous system to be particularly affected ; the one being more frequently attended with a petechial, the other with a miliary eruption ; yet Dr Reil was convinced, that both derived their origin from the same material cause. And accordingly the disease, after appearing in the putrid form during the summer, on the occurrence of the cold in winter, was attended with the nervous af-



fections ; and with the returning spring the putrid symptoms again made their appearance. From the history, therefore, which is here given of this fever, we see the propriety of referring, as is done by Dr Cullen, to one genus, that of Typhus, the fevers commonly denominated by the appellations both of putrid and nervous. These are to be reckoned merely different modifications of the same disease ; and though varied in appearance, yet as being precisely of the same nature. Nay, not unfrequently, even in the same patient, the symptoms principally characterizing both will be found conjoined.

After the description of this disease, Dr Reil concludes his observations with a few remarks on the method of cure. This, he observes, was upon the whole very simple.

In the beginning of the disease, while it still appeared to be rather of an inflammatory than nervous disposition, it was combated by drinks acidulated by the acid of tartar, vinegar, or the vegetable acid in its recent state. Neutral salts, even in small doses, in the beginning

ginning of this fever, were very generally found to be hurtful.

Emetics were found highly serviceable at every period of the disease ; and their repetition was often indicated by symptoms of fordes in the stomach, and spontaneous vomiting. They rarely failed to afford relief, when they produced a large discharge of pituitous or bilious matter. With some, even from the beginning, emetics did not excite vomiting, but produced looseness. This was always an unfavourable symptom. But with those in whom great nervous stupor had taken place, they neither produced vomiting nor purging. There, though no evacuation took place from the alimentary canal, stimulants were introduced for restoring sensibility ; and upon this being done, vomiting took place from small doses of emetics, or even spontaneously.

Where it was necessary to move the belly, injections were in general preferred to purgatives, as the latter were sometimes observed to produce faintings, loss of strength, and excessive looseness.

As

As soon as the nervous symptoms appeared, recourse was had to an infusion of valerian root, with a proportion of *Serpentaria* and *Angelica*; and tinctures of these articles mixed with wine were prescribed, if great torpor of the nervous system seemed to require stronger stimulants. Wherever there was a collection of fœces in the intestines, dyspnœa, dry tongue, parched skin, and other marks of diminished secretion, the symptoms were very generally augmented by the use of Peruvian bark. But when symptoms of putridity occurred, and in the stage of convalescence, when the tongue was moist, and the pulse soft and equal, with very great weakness, arising from atony of the solids, it was found to be of service.

Camphor was found to be an excellent remedy, and productive of many advantages in this nervous fever. Recourse was had to it with benefit, where, with the greatest debility, there was too much sensibility of the nerves, where a speedy stimulant was required, where there was a state of inertia in the small vessels, or where perspiration was to be promoted. Camphor was exhibited  
in



in the beginning of this fever, when, after evacuating the stomach by an emetic, there remained vertigo, horripilations, a slow pulse, and a languor of all the functions. And finally, it was used with advantage when nervous inflammations were conjoined with this fever.

Besides these articles, wine, sinapisms and blisters were occasionally employed, according to circumstances. When blisters were employed for exciting the torpid powers of nature, they were removed as soon as redness of the part was produced. With the same intention, large portions of the surface were directed to be rubbed with acrid fluids, which operated even more expeditiously than blisters in stimulating the nerves and capillary vessels to more lively oscillations.

These were found to be the most successful remedies against this fever, which made its appearance in the month of October, prevailed with the greatest frequency in January and February, and began to decline about the end of March, and was succeeded by a fever in a putrid form, which had also preceded it.

After

After some remarks on the *Hernia Adnata*, or *Incarcerata*, Dr Reil next proceeds to give an account of a fatal retention of feces from stricture of the intestines. This affection occurred in a salt-maker, in the 45th year of his age. He was of a robust, though lean habit of body, a condition common to salt-boilers, from the hard labour and heat to which they are exposed. About two years before his death, upon violent exertion in lifting a heavy weight, he was seized with so severe a pain about the region of the loins and os sacrum, as to be unable to raise or turn himself in bed. The pains by degrees diminished; but an obstruction of the alvine discharge continued, conjoined with frequent colic pains returning on the slightest accident. These in the beginning were easily removed, but became gradually more obstinate, yielding however to glysters and medicines moving the belly.

On the 1st of September 1787, after eating fish, he had a most violent attack of the colic pains, with obstinate costiveness. On this occasion, recourse was had to the usual glysters and laxatives, but in vain; and on  
the



the fifth day of his disease, he applied for assistance at the Clinical School. At that time his abdomen was hard and swelled, and affected with so severe pain that he could hardly bear the slightest touch. Various laxatives by the mouth, and different injections, were tried, to no purpose. On the eighth day of his disease, a strong hard pulse, and excruciating pains, seemed to indicate blood-letting; after which, recourse was again had to various laxatives and injections; all which, however, brought off nothing but flatus, with very transitory relief; and on the eleventh day, the discharge of some small portions of the skins of pears, which he had ate a considerable time before the commencement of this attack. On the same day, the epigastric region became distended, under the form of a circumscribed and elastic tumour, which, upon percussion, emitted a hollow sound. The intestines were frequently examined, by means of a bougie introduced into the anus. This could easily be made to enter to the extent of about ten inches; but then it constantly met with an irresistible obstacle. On the thirteenth day,

a discharge took place of some small hardened fragments of excrementitious matter, with a copious discharge of flatus, and remarkable relief; and the farther distension of the belly, to which cold applications had often before been tried, seemed to be successfully checked by the application of ice. On the fourteenth and fifteenth days, during very excruciating pains, the patient felt as if the contents of the intestines were constantly moved to that part where the resistance was felt by means of the bougie. From this time all the symptoms were still farther increased. Anxiety, dyspnœa, loss of voice, and a Hippocratic face, soon occurred as the forerunners of death, which happened on the twenty-third day of his disease.

On the second day after his death, the body was inspected in presence of the pupils at the Clinical School. The abdomen was swelled to an enormous size; and upon the peritoneum being cut through, a great quantity of highly fetid air rushed forth. Upon farther opening the abdomen, all its contents, particularly the convolutions of the intestines, appeared covered with that gelatinous

tinous matter, which is furnished by the transudation of the gluten of the blood; which appearance, Dr Reil observes, arises not only from inflammation, but from every disease where there is a sufficiently powerful obstruction to the circulation.

The intestines, when freed from this covering, appeared to be found, excepting a few parts of the ileum, which were somewhat redder than natural. In the smaller intestines, no excrementitious matter, or signs of obstruction, were to be discovered. But the colon from about the middle began to be enlarged; and this dilatation was gradually increased, so that about its sigmoid flexure it had acquired nearly the diameter of the stomach. The dilatation was so great, that all the rugæ of the colon were obliterated, so that it exhibited merely a plain surface. But when it came to its termination in the rectum, it became suddenly much more contracted than natural. At this place, for about the length of three inches, it was in a scirrhus state, hardened to the consistence of cartilage, and so much contracted that its cavity would scarce admit the little  
finger.



finger. In the cœcum there were few feces, but these were very much hardened; and this was also the case with the ascending part of the colon; but its enlarged part was completely filled with fetid ash-coloured feculent matter, in the state of thin pulp. These, from their nature, the slightest contraction of the colon might have been able to expel, had the passage been pervious.

This disease, as has already been observed, seemed to have begun about two years before, upon the patient's attempting to raise a very heavy weight, at which time he was seized with severe pain in his loins. Dr Reil thinks, there can be no doubt that this pain arose from inflammation of the part which was found affected after death; and that this inflammation, not being resolved at the time, had terminated in a scirrhus and callous induration. He states it as a query, Whether a cure might reasonably have been expected, had the cause of the disease been known during the life of the patient? But whatever might have been the case at the commencement, he thinks that a cure was not to be looked for from the time that this  
patient

patient came under his care, on account of the dilatation and atony of the colon, which was no longer able to propel the excrements, though in a very fluid state. He does not therefore think, that a radical cure was here to be expected from the use of antimonials, mercurials, cicuta, belladonna, or the like. But in such cases, from a mild and emollient diet, with the use of gentle laxatives and injections, there would at least be hopes of protracting a doubtful life for some years.

After some observations on Ophthalmia, especially on the Ophthalmia Glandulosa, as it is styled by Dr Reil, and which he considers as a genus comprehending several different species, he concludes this first fasciculus of his Memorabilia, by the history of a case in which there occurred a singular resolution of the blood. The patient, by trade a shoemaker, was a man in the 27th year of his age: he was of a middle stature, thin habit, and yellowish complexion. Though never formerly subjected to any severe disease, yet about four weeks before Dr Reil first saw him, he became affected, in consequence of violent indignation, with great



lassitude, for which, by his own direction, he had recourse to blood-letting, as he imagined with some relief.

On the morning of the 14th of July 1787 he applied for Dr Reil's advice, in consequence of hæmoptysis, and bloody vesicles over different parts of his body, which had broke out during the course of the preceding night. While he was giving an account of his complaints, he constantly spit from his mouth, without either cough or vomiting, a black-coloured bloody fluid, nearly of the consistence of water. When Dr Reil accurately examined his mouth, in order to determine from whence this proceeded, he saw, with astonishment, that this thin black blood, which, as being constantly collected in his mouth, he was obliged to spit out, oozed from almost every pore of the cheeks, gums, fauces, and palate; and at the same time, there were numerous vesicles filled with thin black blood, not only over the surface of his body, but also on the tongue and inside of the mouth, which, from the separation of the epidermis, rose to the size of peas.

With

With these appearances, all the other functions of the body remained in their natural state. He enjoyed perfect tranquillity of mind. His pulse was natural; his sleep was sound when not interrupted by the efflux of blood into his mouth; his appetite was good; he walked about, and transacted his ordinary business without any uncommon fatigue.

Dr Reil directed the internal use of Alum, Peruvian bark, and Vitriolic acid; and he advised a gargle for the mouth, which had for its basis alum and vitriolic acid. But these practices proved in vain; for the symptoms above enumerated remained for this and the succeeding day without any alteration. But on the third day, to these symptoms others succeeded, particularly various hemorrhages, such as bloody urine, a discharge of blood by the belly, and hæmoptysis. On the forenoon of the fourth day, he remained nearly in the same condition, the hemorrhages still continuing; but he complained of nothing else, and was engaged in his usual occupation till mid-day. At that time he took dinner to the usual extent, and with his or-

dinary appetite ; but immediately after dinner, he was seized with so severe a pain of his head, that he was forced to ly down upon his bed. Dr Reil was then sent for, and found the patient with almost a total abolition of his mental faculties, his eyes very red, his respiration stertorous, and his pulse unsteady. In about three hours after he had taken dinner he died, apparently of sanguineous apoplexy.

The dissection of his body after death was not permitted. After the most deliberate inquiry, Dr Reil could not learn, that before the attack of this disease the patient had employed any medicines of a septic nature, or taken in the way of food any article of a poisonous quality ; nor could he discover any other cause, to which this affection could be attributed. He justly observes, therefore, that such a resolution of the whole mass of circulating blood, occurring in so sudden a manner, and without any manifest cause, was truly wonderful.

The disease here described, however, cannot be considered as one never to be met with. Although this affection, it must be  
allowed,



allowed, be but rare, yet, in our own practice, we have had occasion to treat upwards of a dozen of cases, in their symptoms nearly similar to that which is here described. Of these, some, like the instance before us, had suddenly a fatal termination. In others, there was a spontaneous gradual recovery, which could hardly be attributed to any medicine. A remarkable instance of this disease, under the title of *Petechiæ sine febre*, is recorded by Dr Duncan, in a volume of *Medical Cases and Observations*, published about twelve years ago. And very lately, the same affection, under the title of *Hæmorrhœa Petechialis*, was the subject of an ingenious inaugural dissertation, published by Dr James B. Makittrick Adair, now physician in Edinburgh. From these publications, as well as from the present, some information may be obtained, respecting the appearances and progress of this disease. But the causes, the nature, and the cure of this affection, in our opinion, still remain to be investigated.

## II.

*Experiments on the Nervous System with Opium and Metalline Substances, made chiefly with the View of determining the Nature and Effects of Animal Electricity. By Alexander Monro, M. D. Professor of Medicine and Anatomy in the University of Edinburgh, &c. 4to, Edinburgh.*

SOON after the experiments of Galvani, Valli and others, had drawn the attention of the public to the subject of Animal Electricity, Dr Monro, as well as many other eminent physiologists, thought it an object deserving his researches; and he read the result of his observations in two papers presented to the Royal Society of Edinburgh. The first of these was read on the 3d of December 1792, and the second on the 3d of June 1793. In the work before us, we are presented with the substance of both these, as well



well as with the additions which he has made since that time.

As Dr Monro's experiments on both Opium and Animal Electricity have been performed chiefly on frogs, he introduces his subject by premising some observations on their circulating and nervous systems. Their heart, he observes, consists of one auricle and one ventricle, the aorta supplying blood to the air-vesicles or lungs, as well as to all their other organs, and the venæ cavæ returning the blood from all parts to the heart. The ventricle of the heart contracts about sixty times in a minute, and the purple colour which is seen within it, disappears at each contraction; a proof that by this means the blood is entirely expelled.

A frog can crawl or jump about for upwards of an hour after its heart is cut out; and for half an hour longer it can contract its legs when the toes are hurt, though not with sufficient force to move its body from the place where it is laid.

The encephalon of a frog consists of brain and cerebellum, each of which, on its upper part, is divided into two hemispheres; and

below they are conjoined by thick crura, which form the medulla oblongata and spinal marrow, both of which are proportionally larger than in man, and more evidently consist of two cords.

With regard to the immediate necessity of the brain for the support of the functions, Dr Monro observes, that two days after cutting off the head of a frog at its joining with the first vertebra, he found it sitting with its legs drawn up in the usual posture; and when its toes were hurt, it jumped with very considerable force. Its heart also continued to beat about forty times in a minute; and so strongly as to empty itself and to circulate the blood.

Dr Monro found, that after a large portion of the spinal marrow, with the cauda equina, were removed, though the lower extremities became insensible to injuries, yet that the frogs lived for several months; and that the bones of their legs, when fractured, were reunited; the blood continuing to circulate freely in their vessels.

It is, Dr Monro observes, universally known, that if, after amputating the limb  
of

of a warm-blooded animal, we repeatedly irritate the nerves which terminate in muscles, repeated convulsions of the muscles are for some time produced; and that in frogs, and other cold-blooded animals, the nerves retain their power still longer. But it has commonly been supposed, that after irritating the nerve a given number of times, the effect ceases, authors conceiving, that there is lodged in the nerve some fluid, or other energy, which is exhausted by repeated explosions. Instead of this, Dr Monro has found, that the time for which the nerves preserve their power is the same, whether we irritate them or not. Thus it appears, that their energy is not exhausted by irritation, unless the irritation be such, as sensibly to alter their texture.

After these preliminary observations, Dr Monro next relates several experiments made with opium and animal electricity, from which he deduces several conclusions. And particularly,

1. That the frog, after its head is cut off, feels pain, and in consequence of feeling, moves its body and limbs.

2. That



2. That the nerves of the hind-legs of a frog do not seem to be derived solely or chiefly from the brain or cerebellum.

3. That as opium, after the circulation ceases, affects organs distant from those to which it is applied, it is beyond doubt, that the latter suffer in consequence of a sympathy of nerves.

4. That in the frog there is a sympathy of nerves after the head is cut off.

5. That in it the brain is not the sole seat of the sensorium commune.

6. That the nerves do not receive their energy wholly from the head and spinal marrow, but that the texture of every branch of a nerve is such as to furnish it.

7. That opium may be absorbed in such quantity, as to produce fatal symptoms.

Mr Fontana has lately endeavoured to prove, that poisons operate by changes which they produce on the mass of blood, or some unknown principle connected with it. But this opinion is, Dr Monro thinks, rendered inadmissible from the following, among other considerations: 1. Poison does not operate so quickly when introduced into a  
vein



vein of the extremities, as when mixed with the blood near the heart. 2. Cutting the spinal marrow of frogs before applying the poison of the viper to their legs, prevents it from killing them. 3. When the poison of the viper is mixed with the blood, pain is produced in the same manner as when the leg is bit by a viper; an evident proof that the poison acts upon the nerves of the blood-vessels. 4. Animals were convulsed as soon as they were wounded, and long before the blood could have reached the muscles in action. 5. Convulsions instantly ensued as soon as the water of the lauro-cerasus was poured into the stomach of a pigeon, before the poison could have entered the mass of blood. 6. After cutting the *venæ cavæ* and aorta of a frog, a watery solution of opium poured into its heart, occasioned in a few minutes convulsions in its legs; and after cutting out the heart, opium poured into the cavity of the abdomen, affected the legs in the same manner.

We are next presented with a summary of experiments made on animals with metal-line substances, with the view of leading us to

to judge more directly of the nature and cause of animal electricity. As a detail of these experiments, however, would exceed the limits which we must necessarily prescribe to ourselves in this analysis, we shall here content ourselves with presenting to our readers, a view of those facts which Dr Monro thinks are fully established by them.

1. On forming a circle, by means of the parts of a living animal, and of different metallic bodies, especially gold and zinc in contact with each other, if a nerve makes part of the circle, the muscles in which the nerve terminates are convulsed.

2. Although the nerve making part of such a circle has been cut transversely, yet, if the divided parts of the nerve be laid in contact with each other, or tied together, the muscles in which it naturally terminates are convulsed.

3. If the metals composing part of the circle be kept steadily in contact with each other, the convulsions of the muscles cease; but if they be separated from each other, and again rejoined, the convulsions are repeated.

4. The

4. The effects are the same, though dead parts of an animal, or pure water, make part of the circle.

5. Although the dead parts of an animal making part of such a circle be in contact with the metals, the effects are the same.

6. A muscle making part of such a circle may be convulsed, whilst the matter put in motion is passing in the direction from the muscle to the nerve.

7. The muscle may be convulsed, although it makes no part of the circle in which the matter put in motion passes; and the fluid put in motion by the metals, passes readily along a nerve after it has been cut, provided the divided parts are brought into contact with each other.

8. The effects are the same when the animal and the metals are insulated, by being placed on glass, whilst sealing-wax is interposed between the hand of the operator and the metals.

9. If any part of the circle be composed of sealing-wax or glass, the muscles are not convulsed.

10. Con



10. Convulsions are not excited unless the metals be in contact with each other, and unless both metals be in contact with the animal substances, or the water making part of the circle.

Dr Monro next considers the different particulars in which the fluid set in motion by the application of different metals to each other, agrees with the electric fluid. Like the electric fluid, he observes, it communicates the sense of pungency to the tongue. It is readily conveyed by water, blood, the bodies of animals, and by metals; and it is arrested in its course by glass, sealing-wax, &c. It passes with similar rapidity through the bodies of animals. It excites the activity of the vessels of a living animal, thus producing pain and hæmorrhage. It excites convulsions of the muscles, in the same manner, and with the same effects as electricity. When the metals and the animal are kept steadily in contact with each other, the convulsions cease, or an equilibrium seems to be produced, as after discharging a Leyden phial.

Dr



Dr Monro concludes these observations, by considering the important question, Whether the nervous energy be, or be not, the same with the electric fluid; or with that fluid set in motion by the contact of different metals, which, from the singular effects which it shows in animal bodies, has obtained the name of Animal electricity. Dr Monro thinks it clearly proved, that the nervous fluid is by no means the same with these, from the following considerations:

1. Without stating the difficulty which there is in conceiving how the electrical fluid can be accumulated by, or confined within our nervous system, he observes, that where the electrical fluid is accumulated by an animal, such as the torpedo or gymnotus, a proper apparatus is given to the animal, by means of which, it is enabled to collect and to discharge this fluid.

2. The nervous power is excited by chemical or mechanical stimuli, and, on the other hand, is destroyed by opium, and other poisons, which cannot be imagined to act on the electrical fluid.

3. The

3. The theory of Drs Galvani, Valli and others, which supposes that the nerve is electrified plus, and the muscle minus, resembling the Leyden phial, is refuted by the experiments, which shew, that muscles are convulsed where there is no communication between them and the metals, but by the medium of the nerve ; or when the metals are applied to different parts of the nerve alone, without touching the muscles which are convulsed ; and when the muscle which is convulsed makes no part of the circle in which the matter that is put in motion passes.

4. Muscles are convulsed whilst the current of electrical matter is passing from them, and from the smaller branches of the nerves, into their trunks. And as a muscle is never thrown into action by the nervous energy, except when this passes from the trunk of the nerve into its branches, and from these into the muscle, it appears, that when in these experiments the muscles were convulsed, the nervous and electrical fluids were moving in opposite directions ; from which  
it

it may be inferred, that in their nature they differ essentially from each other.

5. The nervous energy is stopt by a tight ligature, or by the transverse incision of a nerve, although its divided parts be afterwards placed in contact with each other; whereas the electrical fluid, or the fluid set in motion by different metals, passes readily downwards or upwards, along a nerve which has been tied or cut.

6. After the limb of a living animal has been amputated, frequent convulsions of the same muscles may be excited, by applying mechanical or chemical stimuli to its nerves, whereas electrical matter discharges itself suddenly.

From these different particulars, demonstrated by his experiments, Dr Monro concludes,

1. That the fluid, which, on the application of metalline bodies to animals, occasions convulsions of their muscles, is electrical, or resembles greatly the electrical fluid.

2. That this fluid does not operate directly on the muscular fibres, but merely through the medium of the nerves.



3. That this fluid, and the nervous fluid or energy, are not the same, but differ essentially in their nature.

4. That this fluid acts merely as a stimulus to the nervous fluid or energy.

5. That these experiments have merely shown a new mode of exciting the nervous fluid or energy, without throwing any farther or direct light on the nature of this fluid or energy.

The subject of animal electricity, which may still be considered as new, is, it must be confessed, in many respects intricate. But, from the light thrown upon it by the experiments and reasoning advanced by Dr Monroe in his treatise, we cannot help considering, as the most probable opinion, that the appearances exhibited in living animals by means of different metals, are, in reality, merely electrical phænomena.



## III.

*A Treatise on the Structure, Economy, and Diseases of the Liver, together with an Enquiry into the Properties and Component parts of the Bile and Biliary Concretions. Being the substance of the Gulstonian Lectures read at the College of Physicians in the Year 1792. By William Saunders, M. D. Fellow of the College of Physicians, of the Royal Societies of London and Edinburgh, and Senior Physician to Guy's Hospital. 8vo, London.*

THE bile is a fluid in the animal economy, which, from many different considerations, has claimed the particular attention, both of the physiologist, the pathologist, and the practical physician. And although, by the investigations of modern physiologists, much light has been thrown upon it, yet the ingenious and learned author of the

treatise now before us, has, in many particulars, removed the errors of former writers, and has, in our opinion, furnished us with a more accurate and satisfactory account of this fluid, than any yet offered to the public.

After a short anatomical description of the Liver, Dr Saunders proceeds to consider its vessels. Here a striking peculiarity, with respect to this viscus, naturally claims attention. In other organs, the functions of nutrition and secretion are combined in the same vessel; in the liver, these offices are performed by different vessels. That blood which has received a change from respiration, is best adapted for the purpose of nutrition, therefore the liver receives its nutritive blood from an artery. The hepatic artery, agreeably to the general law of distribution, divides into branches; and its ramifications multiply and extend, with great minuteness, through the whole mass of the liver; so that in every part of its substance, there is circulating blood, possessed of properties fit for nutrition.

With

With respect to secretion, while other fluids are formed from florid arterial blood, the bile is formed from blood of a dark colour, possessing the common characters of venous blood, conveyed to it by the vena portarum, bringing back blood from the stomach, intestines, pancreas, and spleen. As the function of this vein differs from that of other organs, it has been supposed to possess some peculiarities of structure. It does not, however, Dr Saunders observes, possess the discriminating mark of an artery, the power of preserving its orifice circular when divided transversely. But he admits, that it differs from veins in general, in having thicker tunics in proportion to the capacity of its canal; although he adopts the opinion of those who hold, that the capsula Glissoni, as it has been called, extends no farther than the trunk of the vena portarum; and that, as soon as it has arrived at the liver, it quits the vessel, and by expanding itself over the substance of the gland, forms its tunic.

The extremities of the branches of the vena portarum end in two ways. Some



inofculate with the branches of the hepatic veins, and, through that channel, return to the inferior vena cava all the blood which is not employed in the bufinefs of fecretion. Others terminate in the beginnings of the hepatic ducts called pori biliarii. From thefe very minute beginnings, the biliary ducts gradually enlarge by a union of branches, till at length they pafs out of the liver at its fiffure, by two or three trunks, which, joining together, form the trunk of the hepatic duct.

After a few obfervations on the ftructure of thefe ducts, and on the nerves, as well as the valvular lymphatic abforbents of the liver, Dr Saunders next proceeds to make fome remarks on the nature of the blood circulating through the vena portarum. That venous blood is more fitted to the fecretion of bile than arterial, Dr Saunders thinks, may with confidence be inferred, from the liver being an exception to the law of nature, in the economy of other glands. From the refult of feveral experiments which are here related, particularly a comparifon of bile taken from the gall-



gall-bladder of a dog from whom the spleen had been removed, with that of another dog in whom every organ was left entire, he thinks it highly probable, that the bile secreted after the loss of the spleen, differs in no respect from other bile; and therefore, that the liver, in the exercise of its functions, is not dependent on the spleen. But from the case of the foetus in utero, where the blood in the vena portarum has more of the arterial condition than that of the adult, and the bile possesses less activity, the influence of venous blood in this secretion, is clearly demonstrated.

In some observations on the hepatic artery, and the office of the blood which it contains, Dr Saunders shows, that the arguments of those who contend, that besides carrying blood to the liver for its nourishment, it concurs with the vena portarum in the secretion of bile, are by no means conclusive. He mentions, however, an extraordinary case of a *lufus naturæ*, which lately occurred to Mr Abernethy, teacher of anatomy, in which the vena portarum, instead of carrying its blood into the substance

of the liver, terminated in the vena cava, near the emulgent veins. The hepatic artery, which appeared to be somewhat enlarged, was the only vessel carrying blood to the liver, and, in this instance, performed the double function of secretion and nutrition: for, that bile was secreted here, evidently appeared from its presence, both in the intestines and gall-bladder.

With regard to the interior structure of the liver, Dr Saunders concludes, that the true secreting vessels are the very ultimate branches which communicate with the *pori biliarii*. But here it has long been a question, whether the secreting vessel communicates with the beginnings of the excretory duct, by a cylindrical continuation of canal, or whether there be interposed a cell or follicle. And this question, Dr Saunders thinks, with regard to the liver, still remains to be decided.

In treating of the course of the bile, Dr Saunders endeavours to show, that the gall-bladder neither secretes its own bile, nor receives it by means of hepatico-cystic ducts, but that it is merely an occasional receptacle  
for

for the bile, whenever there is any impediment to its passage by the common duct into the intestine. But the causes, which naturally determine the retrograde course of the bile from the ductus communis into the gall-bladder, are not constant in their operation. They admit of intervals, during which the motion of the bile is either entirely suspended, or changed for one directly opposite. Thus a surcharge of the gall-bladder is prevented. But by various morbid causes, it is well known, that a permanent obstruction to the passage of bile into the duodenum may take place, the necessary consequence of which is jaundice, from the bile being conveyed into the blood. But the channel by which it is conveyed, has given rise to controversy. Some assert, that the bile after secretion is carried to the blood-vessels by its regurgitation; while others attribute this effect entirely to absorption.

Dr Saunders gives a particular account of two experiments which he performed with the view of determining this question. The first proves, he thinks, that the absorbents  
of



of the liver are certainly concerned in the production of jaundice ; while the last demonstrates, with equal force, that when, from the operation of any obstructing cause, the bile is accumulated in its ducts so as to distend them in a considerable degree, Nature relieves herself in part, by allowing a portion of it to take a retrograde course by the hepatic veins.

Dr Saunders next proceeds to treat of the Bile itself. After giving an account of its sensible qualities, he relates several experiments made with the view of ascertaining its constituent parts, principally by the addition of acids and alcohol. From these, of which we cannot here pretend to give a particular detail, he concludes, that bile is resolvable into the following elements : *First*, Water impregnated with the odorous principle of the bile : *Secondly*, A mucilaginous substance, resembling the albumen ovi : *Thirdly*, A resinous substance, containing the colouring principle, and cause of bitter taste : *Fourthly*, The mineral alkali. With respect to the combination of these parts, Dr Saunders thinks, that a saponaceous matter



matter is formed of the bitter resin in union with the alkali. This admits of a ready union with a mucilage; and with this the aqueous matter very easily combines; so that the whole forms a mass apparently homogeneous. It appeared also from experiment, that the bile, though by no means resisting putrefaction for any great length of time, did not run so soon into a putrid state as blood.

Dr Saunders next examines the nature of Biliary Calculi. These he has found to be generally either of a lamellated or radiated structure: on the outer surface, chiefly the former; on the inner, the latter. The colour is extremely various. In some they are of a light colour, approaching to white; in others, as black as jet; in many, of a brown or ochry appearance. They are, he observes, very generally inflammable, and fusible in the fire; and, for the most part, they are soluble in spirit of wine and oil of turpentine. Many of them have the consistence of phosphorus, and cut like wax. In the radiated calculi, there is, Dr Saunders observes,

observes, a substance in every respect like sperma ceti.

This variety in appearance clearly demonstrates, that they are not merely inspissations of bile, but that there is a difference either in the component parts themselves, or in the proportion of these. Hence, for ascertaining their nature, experiments become necessary on different specimens. This, Dr Saunders has probably not yet had an opportunity of doing; but from trials which he made on one which was of a chocolate colour, a large portion of which was dissolved by oil of turpentine, and a small part only by spirit of wine, he inferred, that the specimen which he employed consisted chiefly of a resinous matter, with a small proportion of earth, apparently calcareous, combined with the mineral and volatile alkali.

The next subject of which Dr Saunders treats, is the use of the bile. Green and bitter bile being found in all animals with red blood, and in no other, we may with some probability infer, that there is some relative connexion between this fluid and the colouring matter of the blood, by the red particles

particles contributing more especially to its formation. As aliment dissolved in the stomach does not assume a chylous form till it has passed below that part of the intestine where the biliary and pancreatic ducts make their entrance, it has been very generally supposed, that bile, by mixing with the digested food contained in the duodenum, assists in the process of chylication. From an experiment, however, which Dr Saunders relates, it would seem, that the bile does not intimately mix with the digested matter in any sensible degree ; and if all, or any of the elements of bile do contribute to chylication, yet no traces of their presence can be discovered from the sensible properties of the chyle : And in jaundice, even where the passage of bile into the intestine is completely obstructed, there are yet no symptoms which clearly show a defect of chylication. Dr Saunders thinks it upon the whole probable, even admitting the bile to contribute somewhat to the digestion and assimilation of our food, that its principal use is that of a natural and habitual stimulus to the intestines, keeping up their energy  
and



and peristaltic motion. Hence, in jaundice, not only the intestines become torpid, but this torpor is diffused by sympathy over every part of the system. Hence also an unusual degree of torpor in hypochondriacal complaints, and in chlorosis; diseases in which bile seems to be secreted in too small a quantity.

After these inquiries respecting the properties of bile, Dr Saunders next proceeds to treat of the diseases of the liver, depending on its functions as an organ of secretion. And he begins with some observations on the increased secretion of bile. This is well known to be a very frequent cause of disease among the inhabitants of warm climates. Besides operating powerfully both in the stomach and intestines, occasioning nausea, vomiting, diarrhœa, &c. it generally happens that, during the prevalence of bile in the first passages, some absorption takes place into the habit, so that the skin becomes yellow, and the urine is sensibly impregnated.

The natives of warm climates are less subject to inconveniences arising from the increased secretion of bile than Europeans.

Under



Under such circumstances, a change of climate becomes necessary. By this the secretion is often gradually diminished, the powers of the bile perhaps rendered less active, and the healthy function of the stomach and bowels again restored. But although a sea voyage from tropical climates to England be often of great service, yet the assistance of medicine is often afterwards required to destroy the tendency to excessive secretion, and to restore strength.

In such cases, if, upon investigation, it be found, that no local or organic affection of any of the viscera has taken place, and that the constitution has suffered only by the excess of bile, Dr Saunders recommends it to his patients, every morning before breakfast, to dilute the contents of the stomach, by drinking from half a pint to a pint of water, from 90 to 114 degrees of Fahrenheit's thermometer, conjoining with this moderate exercise. Dr Saunders considers Bath, Bristol, and Buxton waters as not having any powers superior to common pump water heated to the same temperature. Water, Dr Saunders affirms, heated to a certain degree,

degree, when taken into the stomach, will produce giddiness; while the same water, of a lower temperature, has no such effect. And he thinks it probable, that the greatest benefit will be obtained, when the temperature is carried to that degree which produces some sensible effect upon the head. Exclusive, however, of the amusement at watering-places, Dr Saunders admits, that the uniformity of the temperature of the waters may entitle them to some preference.

In sick headaches, as they are called, which, Dr Saunders thinks, generally arise from bile in the stomach, he recommends half a pint of warm water taken daily at bed-time. In all cases, of excessive secretion of bile, Dr Saunders recommends warm clothing, as assisting the stomach in its energy; and wherever the stomach and bowels are extremely irritable by the excess of bile, he advises, that the diet should be moderate in quantity, and of easy digestion. This necessarily excludes melted butter, every thing fried, every species of pastry, together with cold and raw, or unboiled vegetables. Ripe fruits may be admitted in moderate quantities, rather before

fore than after dinner. Water, or wine and water, may be used for common drink. But spirituous liquors of all kinds should, he thinks, be avoided, as having a tendency more directly to produce diseases of the liver, and to weaken the tone of the stomach.

Cholera morbus has very generally been considered as a disease depending on an increased secretion of bile. But the fluid discharged, Dr Saunders thinks, is bile in a very diseased state. From the rapidity of the discharge, there is not, he imagines, time for a perfect secretion; and he conjectures, that a considerable quantity of red globules may escape unchanged from the capillary vessels into the pori biliarii. The cure is, he thinks, best effected, by first diluting the contents of the stomach and intestines; and afterwards, by allaying irritation by opiates. In certain cases, however, blood-letting, blisters, and the warm bath, may be employed with advantage.

The secretion of bile is frequently increased by causes acting on the stomach, as sea-sickness, and emetics. In these cases, there-



fore, the discharge of bile by vomiting, is no proof of its having existed in the stomach before the exhibition of the vomit. It is only the effect of direct action on that organ. In the same manner, in the Bilious Fever of the West Indies, he thinks, that the nausea and vomiting, which arise from some slight degree of inflammation near the pylorus, and upper part of the duodenum, invite bile into the stomach. This, he tells us, has no tendency to produce the fever, and is only to be considered as an effect, not the cause of the disease.

Dr Saunders next treats of the diminished secretion of bile. From the purposes which this fluid serves in the economy, it may with certainty be inferred, that a considerable diminution of the quantity secreted will be followed by disease. From chronic inflammation of the liver, with a variety of other symptoms, a defect in the secretion of bile and a torpid state of the intestines occur. Hypochondriacal complaints are always attended with symptoms of diminished secretion, and great torpor of the alimentary canal. And in chlorosis also, there is a di-

minution

minution of the quantity and activity of bile. In these cases, Dr Saunders tells us, the healthy action of the liver will be best restored, by giving vigour and energy to the stomach and duodenum, from the use of proper diet; avoiding all substances not readily digestible, or disposed to rancidity; directing water for common drink, with the use of some natural chalybeate water of a tepid heat, before breakfast, and perhaps in the evening; employing, at the same time, moderate exercise.

In cases of a diseased structure of the liver, producing a diminution of secretion, mercury, even carried to the degree of exciting a slight salivation, has been found useful. And where obstruction arises from the mere viscosity of bile, this, he tells us, is most effectually removed by calomel, scammony, or jallap. In maniacal persons, there is generally, Dr Saunders observes, a defect in the secretion of bile; and the evil is best removed by the means already recommended.

Dr Saunders next treats of obstruction to the free passage of bile into the duodenum,



which, either from regurgitation by the hepatic veins, or absorption by the lymphatic system, produces jaundice. After explaining at some length the history and the causes of this disease, Dr Saunders proceeds to treat of the cure. This he refers to two heads, the removal of exciting causes, and the alleviation of urgent symptoms. What have been called calculi, are, he observes, the most frequent cause. These we cannot expect to remove by solution, but by promoting their passage. With this intention, like most other modern practitioners, he recommends emetics, cathartics, and gentle exercise on horseback, with the occasional use, ~~when~~ circumstances require, of blood-letting, opiates, and tepid bathing. In jaundice from tumour, mercurials, he observes, may be useful; but when symptomatic fever takes place, he considers them as hurtful. With the view of giving tone and energy to the system, which, in jaundice, is very defective, chalybeate waters may, he observes, be used with advantage.

Dr Saunders concludes the treatise before us, with some remarks on the diseases to  
which



which the liver is subjected in common with other organs of a glandular structure. After describing the symptoms in acute inflammation of the liver, or Hepatitis, he observes, that if the symptoms of fever and local pain continue to increase rapidly for a few days, a suppuration takes place. The formation of pus is distinguished by frequent rigours, and a sense of weight and oppression succeeding that of acute pain. It is, in general, also attended with a sense of pulsation; and in many cases, fluctuation is manifest.

The acute inflammation of the liver is an endemic disease in warm climates, particularly in the East Indies, and very generally terminates in suppuration. But when the symptoms of active inflammation have been checked, though not effectually removed, by the antiphlogistic practice, the disease becomes chronic, and terminates in a scirrhus induration of the organ. This change of structure in the liver, depends on an effusion of coagulable lymph into the parenchymatous substance of the liver; but, according to Dr Saunders, with this peculiarity, that while, in active inflammations, it

is deposited by the arteries, in the chronic kind it is effused by the veins. A state of scirrhus, however, may, Dr Saunders observes, be gradually induced in the liver, without any pre-existing active inflammation, as happens after a long residence in warm climates, where, from frequent accelerated circulation of bile, the hepatic vessels, but more especially the branches of the vena portarum, become so relaxed, that they effuse into the parenchymatous substance of the liver, that solid matter which appears to be nothing more than the coagulable lymph of the blood changed in a peculiar way.

With regard to the active and indolent inflammations of the liver, the former, Dr Saunders thinks, may be referred to the hepatic or nutrient vessel, while the latter may be considered as an affection of its secretory vessel. This, he thinks, is rendered probable, from recollecting, that by far the greater portion of blood which passes through the liver, is of the venous kind; and that this blood is less fitted for active purposes than arterial, which has something in its  
condition

condition fitting an organ for active and vigorous purposes.

In the acute inflammation of the liver, the antiphlogistic practice must be adopted, particularly in early stages of the disease, when there is still a probability of resolution. One of the most effectual remedies with this intention, is blood-letting. The quantity of blood to be taken, together with the propriety of repeating the operation, is to be judged of by the violence of the symptoms, by the effect upon the pulse, and by the circumstances of each particular case. Blisters applied to the region of the liver, co-operate strongly with blood-letting in forwarding resolution. Recourse should therefore be had to them very early. And Dr Saunders assures us, that from his own experience, he has had abundant evidence, that a quick succession of blisters to the vicinity of an inflamed organ, has more influence in overcoming active inflammation than long protracted discharges from a single vesication; and he therefore strongly recommends this practice. Saline purgatives, particularly when considerably diluted, are also highly useful. Benefit, he tells us, is



also sometimes derived from antimonials, in such doses, as may produce a moisture on the skin.

By these means, if a practitioner be called at the commencement of the disease, he will, Dr Saunders thinks, be generally able to check every tendency to the suppurative process. But when suppuration takes place, different phænomena occur, according to the particular part of the liver in which the suppuration is seated. From this variety, the purulent matter is sometimes discharged by the intestinal canal: sometimes by the lungs, sometimes into the cavity of the abdomen. But if an abscess points at any determined part of the integuments, an opening should be made by a lancet for the discharge of the matter. Such abscesses, in general, continue to discharge for a long time; a circumstance rather desirable than otherwise; for, during this process, though tedious, the health gradually returns. Dr Saunders has even known instances, where the discharge has continued for years, during which time the health was in a gradual state of amendment, and at length was perfectly re-established.

Some

Some have contended, that mercury is a specific for every disease of liver, and that even in active inflammation, it will obviate suppuration. Dr Saunders, however, is of opinion, that in this state, from its stimulant properties, it is calculated rather to accelerate than to retard the suppurative process. And he tells us, he has been informed, on the best authority, that the most judicious practitioners in the East Indies, where this specific power of mercury has been chiefly contended for, never exhibit it, till the violence of the inflammatory action has been subdued by bleeding, and the antiphlogistic plan of treatment.

The disposition of hepatitis to terminate in a scirrhus state, is in some cases so strong, as not to be resisted by the moderate action of mercury. Here it is necessary to take the advantage of its more active operations; and instead of inducing a slight change upon the pulse, with only tenderness of the mouth, Dr Saunders recommends, that its effects be extended to the production of a gentle salivation, which, continued for a due length of time, generally, he observes, effects a cure.

## IV.

*A Case of Hydrophobia, commonly called Canine Madness, from the bite of a mad dog, successfully treated. By Thomas Arnold, M. D. Fellow of the Royal College of Physicians, and of the Royal Medical Society of Edinburgh. 8vo, London.*

THE treatise on hydrophobia now before us, while it exhibits an exact history of a particular case of a disease hitherto imperfectly known, affords also an instance of the successful treatment of an affection which has so rarely been cured, as to be generally esteemed incurable. From these considerations, it cannot fail to appear highly interesting to every candid and inquisitive practitioner. We must, however, refer those, who wish for a minute and accurate detail of particulars, to the work itself, where they will find them very fully and distinctly related, from the day on which the patient was bit,

to



to the hundredth day after the accident, at which time she was dismissed from the hospital free from all complaint. We must here content ourselves, with endeavouring to present to our readers, such an abridgement, as will convey to them a distinct idea of the most interesting particulars.

A girl, in the 10th year of her age, who had before enjoyed a state of almost uninterrupted good health, was, on the 26th of March 1792, bit by a dog who shewed every appearance of canine madness. He first attempted to bite her in the bosom, but being impeded by her hand, and by the clothing which covered that part, with no other effect than a deep impression on her left breast, about two inches above the nipple. The part was only bruised, and perhaps a little abraded, but no blood was drawn. The only wound she received, was on the forefinger of her right hand. It seemed as if made by one tooth; and, though not large, blood flowed in sufficient quantity to run down the finger. Her hand was immediately wiped clean, and afterwards frequently  
and

and carefully washed with soap and water. Nothing farther was done for three days. She then began to use the external application accompanying the Ormskirk medicine, which she continued to apply according to the directions ; and she took a dose of the medicine given internally for three successive days.

On the 1st of April, in the morning, as her mother was leading her about to amuse her, and to keep her from eating and drinking for three hours after taking the medicine according to the direction, she began suddenly to be overpowered by drowsiness, and begged she might be permitted to sit down, which being allowed, she fell asleep. This disposition to sleep was so strong, that she could with difficulty be kept awake through the day ; and she, at the same time, complained much of a pain at her heart. In the night she slept pretty well ; but was often waked by pain, and what she termed jumping of her heart.

On the morning of the 8th day from the accident, she was easy, and every way better ; and though she felt the pain at her  
heart

heart now and then, it was very slight. On the morning of the 9th, she ate a hearty breakfast; after which, she went cheerfully to work, and said she felt so free from complaints, that she thought she should be able to do her whole day's spinning. But about 11 o'clock, as she was standing up to rectify something about her wheel, she suddenly fixed her eyes towards a distant part of the room, and cried out, *Take him away, take him away.* She continued for about half an hour with her eyes eagerly bent on some object of imagination, making gestures with her hands and head as if she saw something which terrified her, and from which she wanted to escape, still crying out, *Take him away.* During all this time, she struggled violently to run away, and was held with difficulty.

She then gradually became quiet; suffered herself to be seated in a chair; and for about a quarter of an hour appeared quite insensible. After this, she gave a deep sigh, seemed coming to herself, and called out several times, *Fetch my mother*, not knowing that her mother was sitting by her, and had



for some time during her agitation held her in her lap.

When she became entirely sensible, she lamented and wept much; and on being asked the cause of her distress, she replied, that her head would split, and her heart would come out. Having remained in this state, complaining of her head and heart for about an hour, she was put into bed, where she lay quiet, but sighed a good deal, and perspired very much.

When she first began to recover, her mother offered her a little water, merely with the expectation that it would revive her, and hasten her recovery: and although, at first, she could not make her take it, yet this seems not to have arisen from any incapacity, or reluctance to swallow water; for when quite come to herself, she afterwards drank it for several times without horror or hesitation, and with the same readiness and ease as in health. In this state she was brought to the Infirmary, Mr Bracebridge, surgeon in Leicester, having cauterized the wound on the finger before she was brought to the Infirmary.

When

When she came to the Infirmary on the 9th day from the accident, she was ordered to take immediately the common purging mixture of the hospital, having had no stool for seven days. About 10 at night, she was taken with a kind of fit, preceded by great lightness of her head. During the fit, she struggled much, breathed short, and was continually crying, that dogs or cats would bite, or otherwise hurt her. She at length began to catch and bite at any thing that came in her way. As she grew stiller, she began to mock and contradict, with acuteness and derision, whatever she heard. Her eyes were wild and sparkling, and quick in perceiving whatever presented itself. At times she laughed very much. But towards the end of the fit she wept, and appeared exceedingly uneasy, complaining much of pains in her head and side. This fit lasted five hours.

Next day, the 10th, she had different attacks of the same kind; but she had no particular uneasiness from swallowing fluids more than solids. She was immersed in a cold bath, and showed little reluctance to  
the

the treatment. A blister was applied between her shoulders, and an opium plaster to her throat. She took also, every second hour, half a dram of peruvian bark in red wine.

On the morning of the 11th day, she complained of much sickness, and vomited up her medicines and food. She was thirsty, and somewhat feverish; her head was better, and she had been more composed during the night. She was ordered to take five grains of gum pills, with six drops of laudanum every four hours. Every thing else, excepting the red wine, was ordered to be omitted.

On the 12th day, the patient was so perfectly free from all those symptoms which attend canine madness, that Dr Arnold, as well as his judicious colleague, Dr Bree, joined in suspecting, that there had been a false alarm. But upon the idea that olive oil is efficacious in obviating the poison of the viper, recourse was had to it, as being at once cheap, simple, easily procured, and easily applied. Directions were accordingly given, that she should take one table spoonful



ful of oil of olives every four hours, and that the same oil should be frequently applied to the wound, and to the whole arm. The patient was also ordered to be put into a warm bath.

The warm bath was borne without any inconvenience. She swallowed without the smallest difficulty; and she continued tolerably easy till the 18th day, when she had several of her former fits during the night. These becoming more frequent on the 19th, recourse was again had to laudanum, of which she was ordered to take four drops every three hours, continuing the oil of olives both externally and internally as before. The fits, notwithstanding this, continued; and on the morning of the 22d, she began to dislike the pouring out of liquids, and to take both solids and fluids with great reluctance, and to swallow them with much difficulty; because, as she said, her mouth and throat were sore, and the act of swallowing painful and distressing. She was however put into the warm bath both in the morning and evening, without being much affected on either occasion; and in

the evening, she was ordered to take six drops of laudanum every three hours.

On the 23d, Dr Arnold found that she had passed a good night, though she had been affected with two or three fits early in the morning, which chiefly appeared under the form of spasmodic rigidity of the muscles of the arms, legs, and face. But at this time, on hearing water poured out of one basin into another, she felt great uneasiness, saying, that it hurt her throat. And when Dr Arnold presented a basin of water to her sight, she turned away her head with strong expressions of distress in her countenance, complaining that it hurt her throat. The glands under the chin were found, upon examination, to be rather swelled and painful, as were those in each axilla. The glands of the right axilla, she said, had been painful for several days; and the pain could evidently be traced by gentle pressure, from the wounded finger up the inside of the arm, to the right axilla. She took a scruple of musk in a bolus, which she swallowed very well. Dr Arnold ordered that musk to the same quantity should be repeated every three hours;

hours ; that volatile liniment should be plentifully and frequently applied to her throat ; that she should go into the cold bath ; that she should take a little red port-wine occasionally in sago or otherwise ; that she should omit the internal use of the oil of olives, but continue to apply it externally, as before. In the evening, Dr Arnold persuaded her to swallow a wine glassful of cold water. She appeared much afraid of doing it ; brought the glass several times to her mouth, and drew it back again ; but at length she resolutely swallowed it. Instantly her face and whole body became convulsed. She threw herself on her face upon the bed, and lay in this posture for some time, moaning, and expressing great pain and uneasiness, her whole body appearing quite stiff. As she had taken two of the musk boluses without much inconvenience, and as the apothecary thought that they seemed to abate the spasms, Dr Arnold directed that she should take half a dram of musk in the form of a bolus every three hours. He directed also, that four leeches should be applied to her temples ; that she should go into the

F 2

cold



cold bath next morning ; and that the volatile liniment, and olive oil, should be continued as before.

The disease, though by no means without peculiarities, might now, by the occurrence of the hydrophobia, be considered as fully and distinctly marked. We shall not, therefore, enter into the particulars of each day ; but shall content ourselves with observing in general, that the cold bath, the musk, and the volatile liniment, with the occasional use of leeches, and of magnesia, when she was affected with sourness at stomach, was continued from the 25th, till after the 50th day from the time of the bite. During that time, though she had frequent returns of the fits, yet they were diminished both in frequency and violence ; and the hydrophobia so far gone, that she could, without uneasiness, hear water poured from one vessel into another. Towards the later period of her disease, with the musk, calx of zinc was combined, and afterwards it was given alone ; being taken without the musk, under the form of bolus, with calcined magnesia, and a proportion of liquid laudanum.

laudanum. This was continued till about the 70th day. Still, however, the fits sometimes continued to return. Draughts, with laudanum and the occasional use of laxatives, were continued. But by the 100th day from the accident, she had so far recovered, that it was thought unnecessary to continue any medicines; and she was discharged from the hospital apparently in good health.

After her discharge, excepting slight lowness of spirits, she continued free from complaint, unless on two occasions, when she had slight spasmodic fits. But, upon the whole, according to her mother's account, she was never better in her life.

After giving an exact and faithful narrative of the symptoms of this case, and of the method of treatment from the commencement of the complaint to its happy termination, Dr Arnold offers a few remarks; which, he thinks, may tend to throw some light upon the nature, to promote the cure, and facilitate the prevention, of this violent and unmanageable disorder.

From the history of various cases, it appears, that the dread of water, which has always been considered as a pathognomonic symptom, does not appear at any certain period, but takes an extensive range. The earliest period at which, according to Dr Arnold, it is recorded to have been observed, is the 3d day ; and the latest, 40 years. But the most common period is between the 30th and 40th day after the accident. In the present case, though slight symptoms of the disorder appeared on the 7th day, yet the hydrophobia could hardly be said to occur till the 22d day. Strong and striking symptoms manifested themselves on the 24th.

The great length of time which elapsed before this disorder was entirely subdued ; the variety of other symptoms which occurred, besides the dread of water, such as pains in various parts, spasms, both partial and universal, hickup, fever, inflammation, glandular swellings, cutaneous eruptions, and other complaints ; the various changes and combinations of symptoms ; the frequent increase of symptoms after an apparent cessation,



tion, which seemed to promise a more speedy conclusion of the disorder, are, Dr Arnold thinks, circumstances worthy of observation.

That, in this case, the leading and characteristic symptoms were entirely spasmodic, with a greatly increased irritability and sensibility, is, Dr Arnold thinks, perfectly obvious from the history. He considers the fever as having been entirely symptomatic. But he thinks it probable, that the general enlargement and induration of the lymphatic glands, and particularly those about the throat and neck, were the immediate effects of the canine poison introduced by the bite into the lymphatic vessels.

The dread of water, as it has been improperly called, is merely, Dr Arnold thinks, the consequence of those painful spasms, which the attempt to drink uniformly produces. The effects of the noise of water, the sight of bright surfaces, and the like, arise merely from the power of association. Though this symptom be so common with the human species, as to have been considered as characteristic of canine madness, yet

it is an undoubted fact, that dogs rarely, if ever, experience it.

In the method of prevention, Dr Arnold observes, that till of late years, practitioners have been miserably deficient. Attention to the wound, however, has at length been judiciously revived, by some of the most eminent moderns; and proper means are used to draw out the venom by washing, sucking, scarifying, cupping, enlarging the wound, and keeping up a constant drain in the parts immediately injured, as recommended by Drs Fothergill, Haygarth, Percival, and others.

In the case here related, after the disease was distinctly marked, Dr Arnold resolved to pursue an antispasmodic and tonic plan. As an antispasmodic, musk was given very liberally, and had, Dr Arnold thinks, a decided effect in checking the disorder. But the great consumption of so dear an article, led him to supply its place with other antispasmodics, particularly flowers of zinc and laudanum; from the latter of which, good effects were, he thinks, evidently obtained. When the patient was  
able

able to take plenty of nourishment, opening medicines, given so as to procure a daily free evacuation by stool, were not only borne with ease, but were of manifest relief to her.

Of the different modes of prevention lately recommended, Dr Arnold gives the preference to the method of washing the wound, recommended by Dr Haygarth; aiding ablu- tion diligently with scarification and fying- ing. But, as appendages to this method, he recommends the application of a blister to the part, to support for some length of time a constant discharge from the wound; the daily use of the cold bath, and the employment of peruvian bark conjoined with steel in any form. He recommends also, such a constant, but temperate use of wine, as may ensure its invigorating and tonic effects, without endangering the introduction of its debilitating consequences.

Dr Arnold concludes his observations on this case, with some remarks on the symptoms of madness in dogs. And on this subject, he acknowledges himself much indebted to Mr Meynell of Quorndon in Leicestershire,



shire, who has paid great attention to this disorder among his dogs, and who readily communicated the result of his accurate observations.

As this is a subject of very great importance, we shall here present our readers with the answers which Mr Meynell gave to different questions proposed to him by Dr Arnold. And to prevent any danger of mistake, we shall copy these answers in Mr Meynell's own words,

“ The first symptom of canine madness in dogs, is, I believe, a failure of appetite in a small degree. I mean, that the dog does not eat his usual food with his usual eagerness ; though, if better food be offered him, he may eat it greedily. A disposition to quarrel with other dogs comes on early in the disease. A total loss of appetite generally succeeds ; though, I have seen dogs eat and lap water the day before their death, which generally happens between seven and ten days after the first symptom has appeared. A mad dog will not, I believe, cry out on being struck, or shew any sign of fear on being

ing

ing threatened ; though he will, very late in the disease, appear sensible of kind treatment.

“ I have never known a mad dog show symptoms of the disease in less time after the bite than ten days ; and I have known many instances of dogs having died mad, as late as eight months after the bite. I think the symptoms generally appear between three and eight weeks after the bite.

“ A mad dog in the height of the disorder, has a disposition to bite all other dogs, animals, or men. When not provoked, he usually attacks only such as come in his way. But having no fear, it is peculiarly dangerous to strike at or provoke him.

“ Mad dogs appear to be capable of communicating the affection early in the disorder, and as soon as they begin to quarrel with, or bite other dogs.

“ The eyes of mad dogs do not look red or fierce, but dull ; and have a peculiar appearance, which is easily distinguished by such as have been used to observe it ; but not easy to be described.

“ Mad

“ Mad dogs never bark, but occasionally utter a most dismal and plaintive howl, expressive of extreme distress; and which, they who have once heard, can never forget. So that dogs may be known to be going mad, without being seen, when only this dismal howl is heard.

“ Mad dogs do not foam or froth at the mouth, but their lips and tongue appear dry and foul, or slimy.

“ Though mad dogs generally refuse both food and drink in the latter stage of the disorder, yet they never show any abhorrence or dread of water; will pass through it without difficulty, and lap it eagerly to the last. But it is remarkable, that though they lap water for a long time, and eagerly, and do not seem to experience any uneasiness from it, yet they do not appear to swallow a single drop of it. For, however long they may continue lapping it, no diminution of quantity can be perceived.

“ I am persuaded, that this disorder never originates from hot weather, putrid provisions, or from any other cause, but the  
bite,



bite. For, however dogs may have been confined, however fed, or whatever may have been the heat of the season, I never knew the disorder commence, without being able to trace it to that cause; and it was never introduced into the kennel but by the bite of a mad dog.

“ The hairs of a mad dog do not stand erect more than those of other dogs. I do not know that there is any thing remarkable in the manner of a mad dog’s carrying his head or his tail. I do not believe that dogs are more afraid of a mad dog, than they are of any other dog that seems disposed to attack them.

“ There are two kinds of madness, both of which I have known to originate from the bite of the same dog. Among hunters, one is known by the name of raging, the other by that of dumb madness. In dumb madness, the nether jaw drops, and is fixed; the tongue hangs out of the mouth, and flaver drops from it. In raging madness, the mouth is shut, except when the dog snaps or howls; and no moisture drops from it.”

We

We have thus presented to our readers, in Mr Meynell's own words, his principal remarks respecting the signs of rabies in dogs. These, we apprehend, if properly attended to, will afford more exact, and more authentic information, than has hitherto been given concerning it. While they serve to correct many mistaken ideas which have generally prevailed, drawn from supposed appearances which have no existence, they, at the same time, point out sufficient marks by which this affection in dogs, even at its commencement, may be distinguished. And whenever a failure of appetite, and an uncommon disposition to quarrel with other dogs appear, the animal should certainly be secured as soon as it can with safety be effected. If these symptoms be the first stage of this disorder, the dulness and peculiar appearance of the eyes, the want of barking, and the dismal and plaintive howl will soon fully characterize the disease; and, thus, accidents of the most dreadful and melancholy nature may be prevented.

## V.

*Dermato-Pathologia, or Practical Observations; from some new Thoughts on the Pathology and proximate Cause of the Diseases of the true Skin, and its Emanations, the Rete mucosum and Cuticle. By Seguin Henry Jackson, M. D. Member of the Royal Medical Society of Edinburgh, Physician to the Westminster General Dispensary, and to the Infirmary of St George's, Hanover-Square. 8vo, London.*

IT is universally allowed, and frequently lamented, that the nature of different cutaneous diseases, as well as the distinctions essential in practice, are involved in very great obscurity. And to this ignorance and doubt, we can have no difficulty in attributing the want of success in attempts to remove them. Every endeavour, therefore, to elucidate their nature, particularly from the pen of one who has had many opportunities



portunities of observing their numerous varieties in actual practice, may justly be considered as well meriting attention. From the nature of the work before us, however, we cannot aim at offering a full analysis of it. We must, therefore, refer to the work itself, for complete information respecting the author's sentiments; and shall here content ourselves with giving a short general view of his ideas on this subject, and of the topics particularly considered in the treatise before us.

After a few introductory remarks on the importance of this subject, as claiming the attention of the physician; and after endeavouring to show, that scrophula, syphilis, jaundice, though by many considered as impetiginous affections, are not really such, but that scorbutus properly belongs to this order of diseases; he proceeds to offer some observations on the anatomy of the Cutis vera, and its emanations, as he styles them, the Rete mucosum and Cuticle.

The cuticle, the outer surface of which is composed of a number of very small squamous

ous laminæ, is, on the side next the cutis vera, very uniform, but still is without any appearance of a fibrous or vascular texture. The substance immediately under it, from its net-work appearance, and soft viscid nature, has obtained the name of Rete mucosum. And it is this rete mucosum which chiefly gives colour to the surface of the body, particularly in blacks. The cutis vera is composed of a close texture of fibres, consisting of capillary arteries, sanguiferous and ferous, with corresponding veins of each kind; of nerves; and of lymphatic absorbents; with the necessary, but small quantity of cellular membrane, which binds them together, forming what may be called the parenchyma of the true skin. The sebaceous glands, with the bulbs and roots of the hair, may, Dr Jackson thinks, be considered as internal appendages to the cutis vera. And the outer surface is distinguished by its papillæ, formed of a combination of vessels knitted together by the intervention of cellular membrane.

All these minute parts, when taken together, constitute, Dr Jackson observes, a most complicated organ, endowed with a

high degree of irritability, and of great importance to the animal machine, both in sickness and in health.

Dr Cullen has arranged impetiginous affections in general, under his class of Cachexiæ; but, as Dr Jackson is of opinion, that in these diseases, the general habit is not cachectic or depraved, he thinks that, with greater propriety, they should be arranged under the locales, which are characterized by an affection, not of the whole body, but of a part only.

Dr Jackson divides cutaneous inflammation into the Phlegmonic, Exanthematic, and Erythematic. These, he thinks, give rise to all the variety of appearances which take place in cutaneous diseases. And he is of opinion, that the remote causes constituting these varieties, operate by inducing a depraved or impaired state of action in the cutaneous vessels themselves. This brings him to the investigation of the proximate cause of impetiginous affections; and after some remarks on the opinions of those who refer them to superabundant acidity, a preternatural saline state of the blood, or the like, which,



which, though perhaps explaining the condition of the general habit, do not account for the local change of the parts concerned, he contends, that the proximate cause of impetiginous diseases, is constantly seated in the cutaneous capillary vessels; and he supposes, that a remarkable sympathy takes place between the external and internal capillaries, to which he attributes many phenomena in cutaneous affections.

After some remarks on the irritability of the capillary vessels, and on their being liable, from their organization, to atony, and even paralysis, he endeavours to show, that the remote causes of impetiginous diseases act by a sedative effect; and explains, at considerable length, the operation of atmospheric cold, of fear, of violent passions, of want of cleanliness, and of the abuse of ardent spirits, as occasioning impetiginous affections. And from his observations on these different particulars, he deduces the following new pathology of these diseases.

He supposes, that the remote and occasional causes of impetiginous affections, operate

rate with a sedative effect, and induce a debility of the nervous and vascular systems, by which the vital functions of the heart and arterial system are considerably and particularly affected; that this debility and irritability will be readily felt at the extreme vessels, but more especially in the capillary vessels of the primæ viæ and true skin; that from their partial operation, a serous or lymphatic plethora will be formed, and a stagnation or obstruction of the perspirable fluid will take place; that the detention of this matter will in a given, though uncertain time, prove a stimulus to the true skin, increase the action of the capillary vessels, and produce the different affections there occurring, according to the state of the effused and secreted matter, the peculiarity of the temperament, and the condition of the neighbouring minute parts; and that eruptions, or other cutaneous appearances, become general, or take place only in particular parts, according to the state of the whole circulating system, and the extent of the vascular debility and irritability which may be supposed partial for the time, and arising from

a diminution of the nervous and muscular energies at the part affected ; these diminished energies, in a greater or less degree, having deranged, or entirely destroyed the circulation in the extreme vessels of the arterial system so affected, probably by having caused a weakness of action, or a paralytic affection of these capillary vessels.

To this treatise, Dr Jackson has subjoined an appendix, containing some observations concerning the action of the capillary vessels on the outward surface of the body as a source of animal heat, and some remarks on recent theories of Scurvy. With regard to the former of these particulars, Dr Jackson is of opinion, that even in the ordinary state of the system, and still more on extraordinary occasions, the pure air of the atmosphere, in contact with the external surface of our body, combines with the human phlogiston exhaled by the perspirable arteries ; and that by this combination, the same products will take place, as Dr Crawford, in his ingenious treatise on animal heat, has supposed to be produced in the lungs ; viz. a certain portion of fixed air, with a



quantity of aqueous vapour. And if that be the case, as well as at the lungs, the blood must receive from the surface a portion of heat, which the atmospheric air before held in a latent state.

On the subject of Scorbutus, after examining at some length the opinion of Dr Trotter concerning this disease, and the arguments by which it is supported, Dr Jackson endeavours, from various circumstances, to show that the proximate cause of scurvy is a certain morbid state, or impaired action of the intestinal and cutaneous capillary vessels, occasioned by the sedative effects of a redundant quantity of phlogiston in the primæ viæ and habit, from the nature of the diet of seafaring people. On this hypothesis, Dr Jackson accounts for the action of different remedies, particularly the remarkably salutary effects of the juice of the lemon in the cure of sea-scurvy, from its destroying the redundant phlogiston injuring the functions of the chylopoietic viscera, and from its property in restoring a due quantity of absolute heat to the system, as the vivifying

vifying principle exciting the motions and moving powers of the muscular fibre.

From these conjectures respecting the cause of Scurvy, and from a consideration of the different practices which have been proposed for the prevention of that disease, Dr Jackson is led to recommend the cortex Quercus, or oak bark, as possessing properties which may render it a more useful marine antiscorbutic, than any at present made use of in the British navy. It does not however appear, from any thing Dr Jackson has said, that a trial has yet been made of it. And it is from the test of experience alone, that any judgement can be formed, how far this conjecture is well-founded.

In a postscript, containing some observations on the scarlet fever, and ulcerated fore throat, Dr Jackson strongly recommends oak bark in such cases, as often preferable to the Peruvian bark. And he has mentioned some instances in which it seems to have been employed with advantage. But his remarks on the practice in cutaneous affections in general, or Dermato-Therapeia, as he styles

it, he reserves as the subject of another publication. And if, from the principles laid down, he shall be enabled to point out a more successful and expeditious method of curing cutaneous diseases than has hitherto been commonly employed, he will render an important service to the community.



## VI.

*An Inquiry into the medicinal Qualities and Effects of the Aerated Alkaline Water, illustrated by experiments and cases. By John Moncrieff, Apothecary, Honorary Member of the Royal Physical Society of Edinburgh. 8vo, Edinburgh.*

THE discoveries which have lately been made in the science of chemistry, have unquestionably contributed much to enlarge the stock of medical knowledge; and give us good ground to hope, that from thence the practice of physic may derive very considerable improvements. Among other particulars, the introduction of the aerated alkaline water against a most painful disease, promises to be none of the least considerable.

Of this article we have already had occasion to speak in some former volumes, particularly when we gave an account of

Dr

Dr Falconer's treatise on that subject in our 17th volume. In the work now before us, we are presented with additional facts and experiments, tending to confirm the efficacy of this article in calcalous cases, and to lead to the extension of its employment with advantage in some other complaints.

After a short, though accurate and distinct account of the method of preparing aerated alkaline water, Mr Moncrieff proceeds to treat of its medicinal qualities and effects. As the aerated alkaline water is a compound of fixed air, salt of tartar, and water, Mr Moncrieff begins, by stating the properties of each ingredient apart. Fixed air, he observes, can be rendered the instrument of health, disease, or death, according to its mode of application. In the cure of diseases, when properly managed, it possesses solvent, stimulant, tonic, and antiseptic powers. The properties of salt of tartar as a medicine, are lithontriptic, antacid, and stimulant. And of water, it is sufficient to say, that it may be considered as a very universal diluent, and general solvent. From the aerated alkaline water in which these

articles

articles are chemically combined, when taken by a person in perfect health, there arises, according to Mr Moncrieff, an increase of the quantity of the urine, which become of a paler colour than usual; the circulation is quickened, the insensible perspiration promoted, and digestion increased. But its qualities and effects, he observes, will be better understood, by considering it as a solvent, a stimulant, a tonic, a diuretic, a diaphoretic, and an antiseptic. On its effects in each of these ways, he offers a few remarks; and he considers its efficacy in diseases on three different grounds, as fully confirmed by the experiments and cases which are subjoined.

From comparing by experiment, the solvent powers of aerated alkaline water, simple aerated water, and pure water on calculus, he found, that by means of the first, a portion of calculus weighing 8 grains, in the space of 50 days lost one half of its weight; while, by the second, an equal portion of the same calculus, in the same length of time, lost only two grains and a half; and by the third,



third, the pure water, it lost no more than one grain.

From comparative experiments of the solvent power of the urine made with the urine of a person using the aerated alkaline water, and with the urine of the same person when not taking that medicine, it was found, that with the former, a calculus weighing 30 grains, in 16 days lost 4 grains ; while another fragment, of the same weight, and during the same length of time with the latter, gained 5 grains. In this experiment, it was also remarked, that no incrustation took place in the phial, when the urine was from the person using the aerated alkaline water ; but that a considerable incrustation occurred from his urine, when not taking that medicine.

From these experiments, the conclusions before drawn from the experiments of Mr Colborne, related in Dr Falconer's treatise, are strongly corroborated ; and it appears beyond doubt, that the aerated alkaline water not only possesses a power of dissolving urinary calculi, but imparts the same quality to the urine, and removes from it that tendency which it has, even in a healthy person,

person, to depofite that matter, of which urinary calculi, as they have been called, are formed.

From Mr Moncrieff's experiments, it alfo appears, that the pulfe was accelerated to the extent of 10 or 12 ftrokes in a minute, in the fpace of about a quarter of an hour after taking an Englifh pint of the aerated alkaline water; after which, it again gradually fubfided to the natural ftandard. He alfo found from experiment, that a bit of beef became putrid much fooner when immerfed into pure water, than when in fimple aerated water. But that in this laft, it did not refift putrefaction fo long as in the aerated alkaline water. From thefe experiments, its ftimulant and antifeptic powers feem to be eftablifhed.

Mr Moncrieff next proceeds to confider the difeafes in which the aerated alkaline water may be ufed. And he here prefents us with fome obfervations on the ufe of it in gravel; gout, affections of the ftomach, and putrid diforders.

In calculous complaints, different practices are often required for the removal of inflammation

mation and spasm; and it is frequently necessary to have recourse to large doses of laudanum for the alleviation of pain. But no medicine is, perhaps, better fitted, than the alkaline aerated water, for discharging the calculus from the kidneys and bladder, and for preventing fresh accumulations. From changing the quality of the urine, it renders that fluid capable of holding the matter which constitutes calculus, in a state of entire solution; and perhaps by its sudorific quality, it discharges the matter from the circulating fluids by insensible perspiration. Hence, even with those who have submitted to the operation of lithotomy, it is often highly useful, as preventing a return of the disorder. And from the experience of those who have taken this medicine for many years, Mr Moncrieff concludes, that if properly prepared, it will never do any harm, though it be used for a lifetime.

Although gout be a disease which often baffles every attempt to an artificial cure, both in the way of medicines and regimen, yet both from the affinity which this disease has with gravel, and from experience of the  
good



good effects of the aerated alkaline water in gout, he recommends it as useful also in that disease. Even from simple aerated water, when it acted as a diaphoretic, he observes, that one gentleman, whose case has been communicated to him, experienced a complete cure. Mr Moncrieff, therefore, infers, that from the aerated alkaline water, which is certainly both a more powerful solvent and diaphoretic, benefit may often be obtained in gout.

Affections of the stomach, particularly those marked by depraved digestion, are induced by a variety of causes tending to weaken the body, particularly such as hurt the powers of the stomach. The cure, in general, consists in removing the causes, and in restoring the natural tone and strength of the stomach. From the gentle, tonic, antacid, and stimulant powers of the aerated alkaline water, it seems well fitted for answering these intentions ; and from actual experience of the happy effects of it in such debilitated states of the stomach, Mr Moncrieff recommends it to the attention of practitioners in these cases.

Although

Although the nature, causes, prevention and cure of putrid diseases, have engaged the attention of philosophers and physicians in all ages, yet much, unquestionably, still remains to be ascertained on this subject. But, without attempting to examine the theories of putrefaction, Mr Moncrieff thinks, that the aerated alkaline water claims particular attention as a powerful antiseptic; and that it may be used with advantage in putrid fevers, scurvy, and other diseases. And he also suggests the propriety of trying it in cases of scrofula, where foul ulcers constitute a great part of the disease.

In confirmation of the properties here attributed to the aerated alkaline water, Mr Moncrieff relates several cases, chiefly communicated to him by the patients themselves, and presented to the reader in their own words. From these, it appears, that very great relief, in circumstances of the utmost distress, has been derived from the use of this remedy, taken in general to about the extent of an English pint in the day.

In the case of Charles Dalrymple, Esq. it appears to have had a powerful effect,  
not

not only in relieving complaints from calculus, but also in preventing the returns of gout. In the case of Sir Alexander Livingston, about five years after, a stone weighing three ounces had been extracted by lithotomy. Symptoms again appeared demonstrating a return of the affection, and, upon founding, a stone was found in the bladder. But, notwithstanding this, by the use of the aerated alkaline water, he has been delivered from excruciating pain, is able to take exercise, and to enjoy the company of friends.

In the cases of the Reverend Dr Blair, Mr Shaw, Mr Robertson, Mr Peebles, and others, we have additional examples of its efficacy in calculous complaints; while in that of Captain Bunbury it was productive of benefit in an affection of the stomach. And by a letter from the Reverend Mr Rowan of Largs, addressed to Mr Moncrieff, it seems to have been employed with advantage in a case of hectic fever, attended with symptoms of putridity.

Although it must be acknowledged, that, on the first introduction of medicines, their



properties have often been over-rated, yet from these experiments and cases, in addition to what had before been published, it appears, that aerated alkaline water possesses such medicinal qualities as entitle it to particular attention.

## VII.

*The Morbid Anatomy of some of the most important parts of the Human Body. By Matthew Baillie, M. D. F. R. S. Fellow of the Royal College of Physicians, and Physician to St George's Hospital. 8vo, London.*

THE great importance of inquiry into the causes of disease, by anatomical investigation after death, is universally admitted by every intelligent and industrious practitioner. For although it must be confessed, that in many instances our investigations in this way prove fruitless, yet in not a few cases the appearances thus detected serve both to correct false theories, and to improve future practice. We must ever, therefore, hold ourselves highly indebted to those by whose abilities and industry important facts have been detected and recorded.

To several valuable publications which have formerly appeared upon this subject,

the work now before us may justly be considered as no unimportant addition. The plan which the learned and industrious author has here followed, is in several respects different from that adopted in the principal works hitherto published on this subject, particularly that of the extensive, elaborate, and truly valuable work of Morgagni, *De causis et sedibus morborum*. Although that publication be justly entitled to the highest praise, yet, from the great length to which it is extended, it is less frequently in the possession of practitioners, and less frequently consulted by them than it ought to be. The present work, from being a more compendious volume, has at least some advantage in being more easily consulted.

Here no particular cases are detailed. The author confines himself entirely to a simple account of the morbid changes of structure which he has found upon dissection in some of the most important parts of the animal body. This is done according to a local arrangement, very much in the same manner as if he were describing the natural structure. From the nature of this work,



as well as from the great number of different particulars which it contains, it can hardly be considered as properly admitting of an analysis. We must therefore refer those who wish for a particular account of the diseased appearances which Dr Baillie has observed, to the work itself; and we must here content ourselves with giving a general view of the subjects which are treated of, and with mentioning merely some rare appearances of disease in the vital and more important parts of the human body.

Dr Baillie first treats of different diseased appearances of the Pericardium, and next of diseased appearances of the Heart itself. Besides describing inflammation and dropsey of the pericardium, adhesions of it to the heart, and the like, he tells us, that he had once an opportunity of seeing two or three scrophulous tumors growing within the pericardium, one of which was nearly as large as a walnut, and that he has twice found the pericardium so changed as to resemble a common ox's bladder in some degree dried.

Under the diseases of the Heart itself, besides inflammation, abscess, gangrene, poly-

pus, ossification of valves, enlargement, rupture, and various other morbid appearances, he gives an account of the heart of a child, in Dr Hunter's collection, which had a hole in the septum ventriculorum, at the basis of the heart, large enough to allow a goose quill readily to pass through it. The child was still-born at six months, and the hole in the septum evidently arose from mal-conformation.

Dr Baillie next gives an account of diseased appearances in the cavity of the Thorax, particularly inflammation, adhesion, empyema, hydrothorax, and ossification of the pleura. This last consists in the formation of a thin plate, which sometimes extends over a pretty broad surface of the pleura. In all the cases which Dr Baillie has seen, the bony matter seemed to be exactly like ordinary bone. It is very remarkable, that this morbid appearance did not seem to have been attended with much inconvenience. No inflammation was found in the pleura surrounding the bone, nor in the substance of the lungs under it.

Under the head of diseased appearances of the Lungs, after describing inflammation as occurring

occurring in this organ, he gives a particular account of tubercles. They are formed, he thinks, in the cellular structure, which connects the air cells of the lungs together; and are not, in Dr Baillie's opinion, a morbid affection of glands, as some have imagined. They are at first not larger than a pin's head; but the most ordinary size is that of a garden pea, although in this respect they are subject to much variety. When cut into, they consist of a white smooth substance having great firmness, often containing in part a thick curdly pus; sometimes the tubercle is almost entirely changed into pus, and then it appears like a white capsule. When several tubercles of considerable size are grown together, so as to form a pretty large tuberculated mass, pus is very generally found upon cutting into it.

After describing different diseased appearances in the posterior and anterior mediastinum, Dr Baillie next proceeds to give an account of the affections of the Abdominal Viscera. He first describes inflammations of the peritoneum; and then gives a particular account of adhesions in the cavity of the ab-



domen as arising from this cause. When the inflammation has been sufficient to have thrown out coagulable lymph, that coagulable lymph is changed into a fine transparent membrane, which is the membrane of adhesions. And from the opportunities which Dr Baillie has had of tracing the change of coagulable lymph into the membrane of adhesions, he concludes, that the time requisite for the change is not long. This membrane consists, he tells us, of a cellular substance similar to the general cellular membrane of the body; and although it does not naturally show many vessels large enough to admit the red globules of the blood, yet it shows its vascularity upon slight degrees of inflammation, or by using a fine injection.

In speaking of inflammation of the Stomach, Dr Baillie observes, that on opening the bodies of those who have died from hydrophobia, the inner membrane of the stomach is frequently found inflamed at the cardia. But this inflammation is commonly inconsiderable only, and in some instances has been said to be wanting.

Scirrhus

Scirrhus sometimes extends over almost every part of the stomach, but most commonly it attacks one part only, and this is generally towards the pylorus, which, Dr Baillie imagines, probably proceeds from there being more of glandular structure in that part of the stomach than in any other. From this cause, a contraction giving obstruction is no uncommon consequence.

The stomach, Dr Baillie observes, is sometimes found so contracted through its whole extent, as not to be larger than a portion of the small intestine; at other times it is enlarged to much more than its ordinary size. But he considers neither of these appearances as arising from disease; they depend, he thinks, entirely on the muscular fibres of the stomach being in a state of contraction or relaxation at the time of death.

In describing inflammation of the Intestines, and its consequences, besides the most common termination, ulcerations of different kinds, he remarks, that through a considerable length of the intestine, he has seen a large portion of it completely stripped of its inner membrane, and its muscular coat  
appeared

appeared as distinct as if it had been very carefully dissected. Inflammation of the intestines, according to Dr Baillie, but rarely advances to mortification. A portion of the intestine, he observes, may be of a very dark colour, from a large quantity of extravasated blood thrown out during a high degree of inflammation, and yet not be mortified. With this colour, the want of natural tenacity is, he thinks, the only sure criterion of a part being mortified, in examinations after death.

After some observations on intus-susception, ruptures, scirrhus, and cancer of the intestines, Dr Baillie next makes some remarks on worms found in this part of the system. These, as here observed in human subjects, may, he thinks, be reduced to three general classes; the *Lumbricus Teres*, *Tænia*, and *Ascaris*. Here Dr Baillie points out with great accuracy the marks serving to distinguish the *lumbricus teres* from the common earth worms. In their external appearance, the parts in which they chiefly differ are the mouth and the anus. The mouth of the *lumbricus teres* consists of three rounded projections,



projections, with an intermediate cavity. The mouth of the earth-worm consists of a small longitudinal fissure, situated on the under surface of a small rounded head. The anus of the *lumbricus teres* opens upon the under surface of the worm, a little way from its posterior extremity, by a transverse curved fissure; while the anus of the earth-worm opens by an oval aperture at the very extremity of the worm. Besides these particulars, the *lumbricus teres* has nothing corresponding to feet; whereas the earth-worm has on its under surface, and towards its posterior extremity, a double row of processes on each side, readily discoverable both by the eye and the finger, which manifestly serve the purposes of feet in the loco-motion of the animal. The internal structure of each is, he observes, also extremely different, and in no particular more than with respect to the organs of generation. In the *lumbricus teres* there is a distinction of sex, the parts of generation being different in the male and in the female. In the common earth-worm, the organs of generation are the same in  
each

each individual, the animal being hermaprodite.

The descriptions which Dr Baillie gives of the *Tænia* and *Ascaris*, correspond almost entirely with those given by other writers. But he observes, that in the economy of animals there is nothing more obscure than the origin of intestinal worms. If they were found to live in situations out of the bodies of living animals, it might be supposed that their ovula were taken into the body along with the food and drink, and there gradually evolved into animals. But they do not seem to be capable of living for any length of time except within a living body. This circumstance may, he thinks, lead to the supposition, that intestinal worms are really formed from the matter contained in the intestines, which previously had no regular organization. And although this idea be widely different from all analogy in the production of animals, where we have any satisfactory opportunity of examining this production, yet Dr Baillie is disposed to think, that when the whole evidence in support of both opinions is compared together, the

the grounds for believing that in some orders of animals equivocal generation takes place, appear stronger than those for a contrary opinion.

Under the head of diseased appearances of the Liver, Dr Baillie describes inflammation of the membrane of the liver, adhesions, tubercles of different kinds, softness and hardness of the substance of the liver. There is, he observes, no gland in the human body, except the kidney, in which hydatids are so frequently found as the liver. They are usually found in a cyst, which is frequently of considerable size, and is formed of very firm materials, so as to give to the touch almost the feeling of cartilage. In this cyst they in general ly loose, swimming in a fluid. They consist of a round bag, containing a fluid capable of coagulation. The bag is formed of two laminæ, and possesses a good deal of contractile power. Although the origin and nature of hydatids be not fully ascertained, yet Dr Baillie thinks it the most probable conjecture, that they are a sort of imperfect animals. This opinion is at least strongly supported by what  
is



is observed of the hydatids found in the livers of sheep, which have been observed to move when put into warm water, and which retain this power of motion for a good many hours after the sheep has been killed.

Among the diseased appearances of the Gall-Bladder, Dr Baillie gives an account of inflammation of its coats, adhesions, scirrhusity; and ossification; after which, he offers some observations on diseased states of the ducts, gall-stones, and bile. He gives an account also of similar diseased states, as taking place in the spleen and pancreas; and he observes, that in the last mentioned organ, calculi have been occasionally found in the ducts. This case, however, is so rare, that he has himself known only one instance of it; and in that case the concretions differed very much in their nature from urinary calculi, being dissolved very quickly by the marine acid, with the extrication of a large quantity of air.

Dr Baillie next describes the principal diseased appearances of the Kidneys, Renal Capsules, and Urinary Bladder, which are chiefly affected with inflammation, suppuration,

tion, scirrhus, cancer, and calculi. And he concludes this subject with several observations respecting the nature of calculi, chiefly extracted from the works of those celebrated chemists, Scheele and Bergman. But although he considers us as much obliged to them for their labours, by which they have ascertained, that urinary calculi in general are neither gypseous nor calcareous, but consist almost entirely of an oily dry volatile acid concrete, mixed with some gelatinous matter, and rarely containing more than a two hundredth part of calcareous earth, yet he is inclined to think, that a sufficient number of urinary calculi have not yet been examined, to ascertain all the variety of their constituent parts; and accordingly, contrary to what appeared in the experiments of Scheele, he met with one urinary calculus capable of being dissolved in marine acid, even in the common temperature of the atmosphere.

After describing the most important diseased appearances of the Vesciculæ Seminales, Prostate Gland, and Urethra, he next gives an account of those of the Testicles and Spermatic Cord, particularly hydrocele, hydatids,

datids, adhesions, the testicles enlarged, inflamed, scrofulous, pulpy, cartilaginous, and even bony. This last affection, he observes, is even not very unfrequent, but is more commonly confined to some part of the testicle, than extended over the whole of it.

Dr Baillie next describes diseased appearances in the female organs of generation. Among others, he takes notice of inflammation, scirrhus; and tubercles of the uterus; of polypus, a very common disease of that organ, by which is meant a diseased mass which adheres to some part of the uterus by a sort of neck or narrower portion. These he has in some instances found not larger than a walnut, in others larger than a child's head. When a polypus is of any considerable size, there is generally but one; but he has on some occasions seen on the inside of the uterus two or three small polypi.

Besides inversion, prolapsus, and stricture of the uterus, he takes notice also of this organ being sometimes in its substance more or less converted into a bony, and sometimes into an earthy matter; but both are very  
rare



rare affections ; as well as a bony or earthy mass in the cavity of the uterus, which he mentions not from his own observations, but from Lieutaud, Cheselden, and others. He concludes by observing, that in some few instances two uteri have been found in the same person, instead of one. In these cases, he remarks, that there is but one ovary and one Fallopian tube to each ; the vagina being at the same time divided by a septum into two canals, each of which conducts to its proper uterus.

Under the head of diseased appearances of the Ovaria, he describes inflammation, scirrhus, and dropfy of these organs ; and gives an account of their being changed into a fatty substance with hair and teeth. Such productions, he observes, have commonly been considered as very imperfect impregnations. But from a case, of which he has given a particular description in the Philosophical Transactions, he thinks there is good reason for believing, that they can take place without any intercourse between the sexes. He observes, however, that a

complete foetus has sometimes been found in the ovarium, though seldom arriving at the full size. When this happens, all vestige of the ovarium is lost; and, instead of it, there is a bag, of some firmness, containing the foetus, which is attached to its placenta, and is also connected with the chorion. This bag can be ascertained to be the ovarium, by tracing upon it the Fallopian tube and spermatic vessels, from their origin to their termination.

After a short account of the principal diseased appearances of the Fallopian Tubes, Vagina, and external parts of Generation, the work before us is concluded with an account of the diseased appearances of the Brain, and its membranes. Here he gives an account of inflammation of the dura mater, of scrofulous and spongy tumours connected with it, of bony matter found in it, and of strong adhesions of it to the cranium. He next describes the diseased appearances of the Tunica Arachnoides and Pia Mater; and concludes with an account of those which are observed in the substance of the brain itself.

self. Having taken notice of inflammation, abscess, and gangrene, he observes, that it is very common, when a brain has been examined in a person who has been dead for several days, to find its substance so soft that it can hardly be cut so as to leave a smooth surface; while, in other instances, it will retain for several days the firmness and resistance which it had during life. Neither of these appearances, however, are, he thinks, to be considered as produced by disease. But this organ is, he observes, sometimes found considerably firmer than in a healthy state, and to have such elasticity, that it will bear to be pulled out with some force, and will react so as to restore itself. Mr Hunter is, Dr Baillie tells us, the only person whom he has heard to remark this property of elasticity in the brain of maniacs; and it was very remarkable in the only case of this kind which Dr Baillie himself had an opportunity of examining.

One of the most common appearances of disease in the brain, is an accumulation of water in its ventricles. This water is, he



observes, of a purer colour, and more limpid than what is in general found in dropfy of the thorax and abdomen ; but it seems to be of the same nature with the water accumulated in both these large cavities ; for by the trials which Dr Baillie made, like these it partly coagulated upon the application of common acids.

There is, Dr Baillie observes, but one sort of disease to which the pineal gland is much exposed, and this is very frequent. It consists of a deposition of earthy matter in its substance. It very rarely happens that a pineal gland is entirely free from earth ; but occasionally it is almost entirely converted into it. In that case, there is merely a very thin covering of the natural substance of the pineal gland surrounding an earthy mass ; and the mass itself is always very easily divisible into small particles, by pressure between the fingers.

It rarely happens that any of the nerves within the cavity of the cranium appear diseased. Dr Baillie has sometimes, however, seen a nerve there a good deal smaller in its  
size

size than it ought to be, softer in its texture, and of a less opaque colour. This he observed to have been particularly the case with one of the optic nerves, in a person who was blind of one eye; and with this appearance there can, we imagine, be little doubt, that the loss of sense in the organ was connected.

## VIII.

*Transactions of the College of Physicians of Philadelphia. Vol. I. Part I. 8vo, Philadelphia.*

**M**EDICAL communications of important facts observed in actual practice, are very generally allowed to be among the most certain means of improving the Healing Art; and the College of Physicians of Philadelphia, with a laudable zeal for the advancement of medical knowledge, present us, in the volume before us, with the first fruits of their labours in this way.

To this volume are prefixed an act of the Assembly of Philadelphia, incorporating the College of Physicians; an Account of the Constitution of the College; a Discourse delivered before them by Dr Rush; and Tables of the Diseases treated at the Philadelphia Dispensary for six years. What may be considered as the transactions themselves,



selves, consist of communications, chiefly practical, of which the following is a short account.

I. Case of Curvature of the Spine. By Thomas Dolbeare, in a letter to Benjamin Rush, M. D. Censor of the College, and Professor of the Institutes and of Clinical Medicine in the University of Pennsylvania. Communicated by the Patient himself, who was 36 Years of Age, and was affected with the Paralytic Symptoms which commonly attend Curvature of the Spine, commencing at that Age.

The application of caustic on each side of the curvature, according to the late Mr Potts' directions, produced, if not a perfect cure, at least such an alleviation of symptoms, that the patient, at the time the account was written, could, by the help of a cane, walk ten miles a day.

II. Case of Hydrocephalus Internus, successfully treated by Mercury. By Dr Michael Leib, Fellow of the College.

In this case the patient, a boy of three years of age, who had received a violent fall

on the head, had all the symptoms of hydrocephalus, except constipated bowels and vomiting. He discharged a large worm of the lumbricus kind, after the exhibition of 76 grains of calomel ; but the symptoms continued as before. After he had taken 112 grains of calomel, he became convalescent. It is worthy of remark, Dr Leib observes, that no impression was made on the disease till the mercury affected the mouth ; at which time a copious discharge of urine was produced, and immediate relief obtained.

III. An Account of a Tetanus, from the Extraction of Two Teeth, successfully treated by the use of Wine and Mercury. By Benjamin Rush, M. D.

Adam Sirbit, a sailor, aged about 30 years, came into the Pennsylvania Hospital to be cured of sore legs. Soon after his admission, he was afflicted with a pain in one of the molares of the upper jaw, for which he was ordered to have his tooth drawn. In extracting the affected tooth, a sound tooth was unfortunately broken, with a small portion of the jaw bone, and the roots of the  
tooth

tooth left in the bone. A few days after this operation, he acted as doorkeeper to the hospital, in which station he was exposed to a cold damp air, the morbid effects of which were rendered more certain from his having been previously confined to a warm and comfortable stove room. The day after he served in this capacity, he was affected with a trismus, accompanied with a swelling on each side of his throat, a full pulse, and a total inability to speak. He complained of neither pain nor rigidity in any part of his body, except in the places above mentioned. A vein was opened, two grains of tartar emetic were given, and a blister applied to his neck. Within a few minutes after he was bled, he was seized with convulsions of the opisthotonos kind, the trismus continued without any change, and he now began to complain of a pain which seldom fails of attending tetanus, at the bottom of the sternum. Within four days after, having had seven quarts of wine and one ounce of bark conveyed through the aperture made by the loss of his two teeth, he  
appeared



appeared to be in his usual state of health. Dr Rush concludes this communication with the following observations.

“ I have heard of two instances of tetanus following the extraction of teeth, both of which proved fatal. One was in St Thomas’s Hospital, in London ; the other was in Buck’s county, in this State. I have seen several instances of an obstinate rigidity in the lower jaw succeeding the extraction of a tooth, which yielded, without any alarming symptoms, to confinement and emollient applications. I have heard of one case, of a constriction of the lower jaw after the extraction of a tooth, being cured by the jaw being pressed down by a strong mechanical force. I communicate these facts without attempting to reason upon them. Perhaps, when more facts of a similar nature are collected, and more minutely described, we may be able to distinguish with precision, when the rigidity of the lower jaw, which follows the extraction of a tooth, may be considered as a local complaint, or as a symptom of general disease.”

IV. An Account of the *Tænia* discovered in the Liver of a number of Rats. In a Letter from Dr Joseph Capelle of Wilmington to Benjamin Rush, M. D.

In the liver of 16 out of 18 rats, Dr Capelle found worms of the *tænia* kind. He remarks, that the two rats in which he saw no worms were very lean, and had livers smaller in proportion than the others.

V. Case of Tetanus. By William Clarkson, M. B. Fellow of the College.

A young man having trod upon a rusty nail, felt immediately exquisite pain, which, however, soon abated, and entirely ceased by the end of the second day. Within five days after, he wrought very hard during the day in the rain and in the water, and was exposed all the succeeding night in his wet clothes to the open air, and to the cold wet earth for his bed. Next day his fatigue was renewed, and he laboured so hard in the rain that pain in the stomach and limbs, with extreme weariness, obliged him to desist from his work. Within two days the incipient symptoms of tetanus appeared.

These

These for four days did not become violent ; but at the end of that time the convulsions were frequent and severe ; the rigidity of the body prevented him from sitting up in bed ; the jaw was stiff, though not closed ; he made frequent complaints of danger from strangling, when about to swallow ; he was distressed with heat, earnestly desired fanning, and would scarcely suffer any intermission of that operation. On the seventh day from the beginning of the disease, general convulsions came on, which continued for a short time, and at length in the night he died rigid. The account of this case is concluded in the following words.

“ This patient was assiduously attended, and in the course of the disease he took 12 quarts of good wine, near three ounces of the thebaic tincture, about four ounces of the bark, half an ounce of Haarlem oil, and two drachms of the volatile alkali. Near two ounces of the strong mercurial ointment were rubbed into the neck and jaws. Although the mercurial frictions salivated the nurse for near a week, there was but little appearance of ptyalism in the patient.”



VI. Account of the successful Application of Cold Water to the Lumbar Region in Calculous Cases. In a Letter to Benjamin Rush, M. D. The Account with which we are here presented is given by the Patient himself.

His method of applying the cold water, was by means of a large sponge to the small of his back, and occasionally to the perinæum. After the application of the water, he always used a dry towel. He observes, "Though I pass as much sand and gravel as before, I have never had a bad fit since I began the above method, which is now nearly two years; and my remedy has been tried by another person with equal success."

VII. Case of Hydrocephalus Internus, with the Appearance on Dissection. By Dr Michael Leib.

In this case the disease proved rapidly fatal. The patient, a boy aged two years and a half, had a violent fall down stairs, attended with a small contusion of the forehead. He complained of no indisposition till a week after the fall, and within a fortnight from that period he died. Calomel, mercurius calcinatus,

calcinatus, and mercurial frictions were prescribed; but Dr Leib observes, those remedies were not carefully administered. The following appearances on dissection clearly shew, that the disease which proved fatal had been preceded by inflammation. “ Upon removing the cranium, the blood-vessels of the meninges appeared more distended than they usually are, and there were several small adhesions of the dura and pia mater to each other. The surface of the cerebrum was extremely moist, the colour of its cortical substance was more pallid than usual, and, upon cutting into it, there were very few of the red puncta which are sometimes observable. All the ventricles were distended, with a clear watery fluid; each of the lateral ventricles contained at least one ounce and a half of it, and the other two about an ounce.”

VIII. Contains an account of the Barometer during the year 1789.

IX. An Account of a singular Case of Ischuria in a young Woman, which continued more than three Years, during which time, if her Urine was not drawn off with

with the Catheter, she frequently voided it by vomiting, and for the last Twenty Months passed much Gravel by the Catheter, as well as by Vomiting, when the use of that Instrument was omitted, or unsuccessfully applied. To which are Annexed, some Remarks and Physiological Observations. By Isaac Senter, M. D. Associate Member of the College of Physicians of Philadelphia, and Senior Surgeon in the late American Army.

The subject of this extraordinary case, a girl of 16 years of age, had been affected, in June 1785, with a pain in the left hypochondrium, accompanied with cough, fever, oppression at her breast, and difficulty of breathing. About four weeks afterwards, she vomited up a quantity of bloody pus, of a very disagreeable kind, which, with the preceding symptoms, induced Dr Senter to think, that a vomica had burst in her stomach; for during the whole of this illness, from his first seeing her, her stomach was so irritable that it was with much difficulty that either food or medicine could be made

to



to sit upon it, and she often vomited up the most simple barley drink.

She had a suppression of urine for twenty-four hours, but did not get any aid from medicine, as nature relieved herself. She, however, became regular in her menses, and recovered so far in about two months, as to return to her usual labour, and continued capable of doing her duty to the satisfaction of her employers till the June following, 1786. On the 3d of this month he was desired to visit her again, when he found all her old complaints, except the suppression of her menses, returned with greater severity than they appeared the last year.

On the 2d of July she was seized with a total suppression of urine, without any perceptible cause, which continued for five days, not being able to void a single drop; and notwithstanding her pain and distress were very great, she did not let her circumstances be fully known to her friends, for fear of having it drawn off with an instrument.

The beginning of the 6th day she was taken with a vomiting, which lasted till she brought up nothing but water, which, she  
said,

said, tasted in every respect like urine. As her vomiting continued, she found relief in the bottom of her belly from the swelling and great forenens she had felt for several days.

A variety of medicines were prescribed, and every method pursued that could be thought of to allay the extreme irritability of her stomach, and restore the natural action of the bladder. Whenever he omitted to draw off the water, says Dr Senter, once in 30, or 36 hours at farthest, she never failed to vomit it up. To ascertain so extraordinary a fact beyond the possibility of a mistake on my part, or a deception on her's, I have often visited her about the time I knew she must vomit, if the catheter was not introduced; and I examined her bladder, and found it full, hard, and tender, and sat by her till the vomiting recurred, saved the water that she brought up this way, and compared it with what I drew off, and found it the same in every respect.

In the month of January 1787, from some cause unknown, she could not be relieved with the instrument, nor could she

vomit up her urine for several days, when it passed off by the navel for three days successively; after which the catheter was used with the same effect as before. From this time to the August following, there was so great a sameness in her complaints, that nothing occurred worth noticing. About the beginning of this month, a brick-coloured gravel began to pass off through the catheter, and soon became so large and plentiful, that neither urine nor gravel could be completely evacuated by the instrument in its usual form. She continued to discharge gravel in this way, whenever her urine was drawn off, till the beginning of November, at which time she felt more distress than usual whenever her urine came off by vomiting, and she soon observed a gritty substance in her mouth. When Dr Senter was informed of this new phenomenon, he requested her to save the urine for his inspection, the next time she vomited. He compared this with what he drew off, and found it contained the same kind of gravel as that which passed the catheter. He procured and saved several drachms of this gravel that came from her, both by the instrument



strument and by vomiting, and could observe no difference either in the colour or consistence of them. To these complaints several distressing and anomalous symptoms supervened; and in this situation she continued for ten months. Through the month of September 1788, her urine could very rarely be drawn off; for upon the introduction of the catheter, a spasm seized the urethra and neck of the bladder; and though the instrument appeared to pass high up into the fundus of the bladder, not more than a gill could be drawn before it stopped entirely, with a sensation of something falling down against its cervix, which she was very confident was a stone.

About the beginning of October Dr Senter was able to introduce the sound, when he readily met with a stone, which appeared of a small size, and rather softer than urinary calculi commonly are. He repeated the examination a number of times, till he was perfectly satisfied that this was the case.

Early in the Spring 1789, her urine began to pass per anum, loaded with the same kind of gravel that had come away by the

catheter. This gave her some respite with respect to her vomiting, though she continued to throw up more or less urine, as well as gravel, that way, every week. During the latter part of Spring and Summer, she became quite paralytic at times, the frequency of vomiting increased, and she had several convulsion fits after vomiting. She grew more and more emaciated; her convulsions returned more frequently; her fever was more putrid; she at last became lethargic, and on the 11th of August died. Leave was obtained to examine the body; and from the following detail it appears, that much less ravage was found in the viscera than might have been expected. Thorax—In this cavity there was nothing appeared unnatural, except a considerable adhesion of the right lobe of the lungs to the pleura. Abdomen—The omentum was principally wasted, but not more than is commonly the case with those who die tabid. It was, however, of a dark gangrenous colour, pretty generally. Stomach—This appeared very much changed from its natural colour, and in a gangrenous state, containing

ing a semipurulent matter, of a fetid scent. Liver and Gall-bladder—There were no preternatural adhesions of the former, nor gall-stones in the latter; and their colour, &c. not unusual. Intestines—In these there were no ruptures, either of their muscular coats, blood-vessels, or lymphatics, that could be discovered. The villous coat was much destroyed, and the colour of the intestines darker than is common, except the duodenum, which was very much discoloured with the bile. Kidneys and Ureters—In these there was no considerable deviation from a state of soundness; they were lax or flabby, but no rupture of any of their vessels, or any calculi discoverable. Urinary Bladder—This was in its natural situation, not the least thickened, had no sand or gravel in it, nor did it adhere preternaturally to any of the circumjacent parts, and the muscular sphincter of its neck yielded readily to the introduction of the finger from the bladder into the urethra. The appearances in the Uterine system are also detailed, but are of little consequence.



Dr Senter concludes his communication with some judicious remarks.

We have been the more particular in our account of this very extraordinary case, from its being perhaps unprecedented in the authentic records of medicine. Baron Haller observes,

“ Inter alia quæ medicum practicum maxime exercent, haud infimum locum merentur morbi insoliti et complicati.”—Such cases would be useful, did they only point out the resources of nature. But their utility is by no means so limited; for they tend to elucidate the various functions of the animal economy. Much light has of late been thrown on the nature of the lymphatic system. The above case may perhaps tend further to enlarge our ideas on that subject. At first sight, it seems very conclusive in favour of the opinion formerly supported by the late Mr Darwin, of the retrograde motion of the lymphatic system. But this conclusion should not be rashly adopted. The many cases where ischuria has proved fatal, without any extraordinary outlet having been provided for the passage of the  
urine,

urine, should induce us to examine very accurately all the circumstances of the above case. It may, perhaps, be discovered, that on certain occasions the lymphatic system is peculiarly affected; and the means by which its actions are altered or deranged, may, by further observations of the same kind, be satisfactorily illustrated.

X. Two Cases of Retroversio Uteri. To which are added, a few Remarks and Observations on that Disease, and the different Species of Procidentia Uteri. By Isaac Senter, M. D.

Both these cases occurred in the same patient. When she became first the subject of Dr Senter's observation, she was supposed to be thirteen weeks gone with her fifteenth child, including three immature births. She complained of a difficult micturition, pain, and what is commonly called by the good women a bearing down. Her pulse was small and frequent, had a dry skin, furred tongue, with considerable thirst, costiveness, &c. On the succeeding day, Dr Senter found that she had passed a very restless night,

and had voided neither urine nor feces, though she had made many attempts, and had been sitting over the steams of a hot decoction of emollient herbs. On inquiring into the circumstances of the case, he learned, that about a week before he had been called in, she had made a mis-step in going down her chamber stairs, at which time she felt such an uncommon sensation as occasioned a fit of fainting. She soon recovered from that, but continued in much pain in her back, pelvis, &c. and perceived an unusual difficulty in walking, as well as in passing her urine, and that the dysuria, costiveness, and pain, had increased from the time of this accident to that of his visiting her. On examination, he found a tumour, tense and elastic, of the bigness of a child's head, within two inches of the external labia pudendorum, so firmly wedged in between the symphysis pubis and os coccygis, that it appeared immoveable, and pressed so exceedingly hard against the lower part of the rectum, that nothing could pass that tube, without making use of more force than she could conveniently bear.

He drew off about six pints of urine.

After



After having placed her upon her knees and elbows, he attempted the reduction of the tumour. Notwithstanding the bladder had been so completely emptied, Dr Senter observes, and her position so favourable for the reduction, it required such a force to overcome the resistance of the parts (for her strainings were violent), as he should not have dared to use, if the life of his patient had not appeared so imminently in danger by a failure in the attempt. After a few minutes steady pressure, and gently disengaging it from the upper part of the symphysis pubis, &c. it began to give way, and he soon conducted it into the abdomen, above the brim of the pelvis, when she cried out with raptures of joy, ‘I am in a new world.’

Her complaints now gradually disappeared, and she carried the child to the full time. During her succeeding pregnancy she was affected with the same complaints, though in a slighter degree, and was relieved by the same mode of treatment. Dr Senter concludes his remarks and observations on the disease in the following manner : “ If a reposition cannot be effected by the hand, as has some-  
times

times been the case, the celebrated Dr William Hunter of London, to whom the world is so much indebted for his judicious directions in this as well as some other diseases, advised to puncture the uterus with a trocar, in order to discharge the liquor amnii, and thereby facilitate the reduction of the vaginal tumor."

Dr Senter, however, might have remarked, that this advice of the late Dr Hunter can never be put in practice, as death has invariably followed the punctures of the uterus, wherever that happened accidentally ; for it was probably never done intentionally. In other respects, Dr Senter's remarks are judicious. He has accurately described the symptoms which characterise Retroversio Uteri, and has clearly pointed out the mode of treatment which ought to be adopted in that disease. This seems to us to have been the more necessary, as an inadequate practice has been lately recommended upon respectable authority, which seems entirely founded on speculative reasoning, and productive of the most fatal consequences.

XI. An Account of a supposed Case of Internal Dropfy of the Brain, successfully treated by Mercury. By Benjamin Rush, M. D.

The subject of this case was a young lady of 26 years of age. As dilatation of the pupil and strabismus were absent, although she had daily puking, and her bowels were obstinately costive, together with a pain in the back part of her head, and frequent delirium, there seems some ambiguity in the case.

XII. A short Account of the Influenza which prevailed in America in the Year 1789. By William Currie, M. D.

The History of an Epidemic Catarrh which was not marked by any extraordinary symptoms, is here accurately detailed by Dr Currie.

XIII. An Account of the State of the Barometer during the Year 1790.

XIV. Case of Inverted Uterus. By Benjamin Duffield, M. D.

This is an account of the successful treatment of a case of partial inversion of the  
uterus.



uterus, although the author, Dr Duffield, styles it a complete inversion. The difference between a partial and complete inversion, perhaps first accurately pointed out in the 6th volume of the 2d decade of our work, page 322, is this, that, in the former, the fundus uteri is alone inverted, and uterine hæmorrhagy constantly occurs; whereas, in the latter, the uterus is completely detached from its connections with the pelvis, and no hæmorrhagy whatever takes place. The two cases differ also in their event. Numerous instances, such as the present, are on record, where the patient survived partial inversion; while perhaps the only case of recovery under complete inversion, is that recorded in the volume of our work already referred to.

XV. An extraordinary Case of a Rupture of the Ligament of the Os Humeri, with the Cure thereof. By Dr Benjamin Say.

This uncommon case embarrassed Dr Say not a little; for after having, with considerable ease to himself, and not much pain to his patient, brought all the parts into their proper

proper places, upon removing his hands the humerus and scapula together immediately fell down again to that part from which he had just before brought them, namely, as low as the axilla. Upon minute and close inspection, he was convinced that the ligament uniting the clavicle with the acromion and scapulæ was completely separated. By the use of the leathern sling communicated by Mr Park of Liverpool to Dr Monro, a drawing and description whereof appear in the 6th volume of Mr Bell's Surgery, the patient was almost completely cured within two months.

XVI. An Account of an Headach cured by the Discharge of a Worm from the Nose.  
By Thomas H. Stockett.

An old lady in Lower Marlborough, had for six or eight months an excruciating headach. At last there commenced a discharge of bloody matter from one nostril; the pain by degrees falling to the corner of the eye, on the side from which the discharge proceeded. Within a few days she closed the nostril affected, and blew hard, when

when out flew a worm about two inches long, apparently with a head at each end, which was white, and the body brown. The lady from that time recovered.

XVII. An account of a new Bitter prepared from the bark of the Root of the *Liriodendron Tulipifera*. By Benjamin Rush, M. D.

Dr Rush recommends this bark as an elegant, cheap, and useful bitter.

XVIII. An account of a singular case of the Small-pox, successfully treated by the plentiful use of Bark, Fermented Liquors, and Animal food. By Benjamin Rush, M. D.

The following circumstances, Dr Rush observes in the above case, appear to merit attention in the case here related, of a man in the 25th year of his age.

1<sup>st</sup>, There was no swelling in the face, or salivation in any stage of the disorder. Dr Sydenham says, he never saw but one case of a recovery from a malignant or dangerous small-pox, without a salivation. Dr Rush  
never



never saw one before ; and never an instance of such a number of pocks, accompanied with so little swelling, which did not terminate in death.

2d, The quantities of fermented liquors which were taken by this patient. These liquors were gradually increased, and gradually diminished, as his disease advanced and declined. He drank five bottles of porter on the 7th of June ; three bottles on the 8th, and two and a half of cyder ; with three bottles of porter on the 9th ; two on the 10th ; and one a day for three days afterwards. These liquors have an immense advantage over ardent spirits, in conveying nourishment into the body, and thereby extending a more durable stimulus to every part of the system.

3d, A third circumstance attending this case, was his plentiful use of animal food, consisting chiefly of salted ham and tongue, and of beef steaks.

4th, Besides these unusual quantities of cordial drinks and diet, he took, in the course of his illness, a pound and a half of the powder of bark.

XIX. An account of the Effects of Electricity in the removal of an Obstruction in the Biliary Duct. In a letter from Dr Jacob Hall, Principal of Cokesbury College in Maryland, to Benjamin Rush, M. D.

Dr Hall, for he himself was the subject of the case, after having in vain tried various medicines for the removal of symptoms, which apparently proceeded from an obstruction in the biliary duct, resolved to try the effects of electricity. Accordingly, he received three strong shocks, which passed through his left arm and breast, and out of his right side, through the part affected; after which, the pain suddenly and entirely ceased; and, in the evening, a diarrhoea came on, which, by its appearance, demonstrated that the obstruction was removed.

XX. Medical Facts and Observations. Extracted from a letter from Moses Bartram, M. D. of St Paul's Parish, South Carolina, to Benjamin Rush, M. D. &c.

The first of these observations relates to cutaneous diseases of the leprous kind. After remarking that the various habits and accidents

accidents of civilized life, necessarily produce a variety in the appearance of diseases; he observes, that he has seen several cases of lepra, which Dr Cullen and most writers declare to be infectious: but the patients, from the united testimony of many people, lived in families in the most unrestrained sociability for years, without the least bad consequence to any body. He has known several people thus affected, who solemnly declared, that their complaints arose from sudden exposure to cold, when excessively heated; and, from the exactness with which they traced them, it was indisputably the truth.

His next observation, contains the history of a case of Tympanites Intestinalis, which, for some months, was mistaken for pregnancy; and which, after having resisted all the ordinary tonic medicines, yielded readily to the use of tobacco by way of smoking.

In the third place, Dr Bartram gives a detail of the symptoms occasioned by eating the seeds of the *Datura stramonium*, or thorn apple; which, as it is curious, we



shall briefly relate. " A child, three years old, was seized with insanity, or rather idiotism, suddenly, without the smallest degree of fever, or any other complaint, to account for so strange an affection. The parents were greatly alarmed, and sent for me. I arrived when the child had been a few hours in this condition ; examined it very closely, found its pulse moderate and natural ; no preternatural heat or flushing ; no thirst ; tongue clean ; no internal function whatever disturbed, but those of the brain : the child was to all appearance happy, talking all the incoherent nonsense that can be imagined, laughing, and in constant motion, but laboured under so great a debility, that it could not stand or walk without tottering ; and several times, in attempting it, fell down ; it was a perfect *delirium mite*. I questioned the parents strictly, if the child had not been eating something improper. They answered confidently in the negative. I still expressed my doubts, and, at last, told them positively, it had been taking some of the above apple ; they were surprised at my obstinacy, and declared none grew near the house. I immediately gave it a large dose  
of

of tartar emetic, recollecting that in the former cases of the same kind which I had seen, there had been a great insensibility of the stomach. This not proving sufficient, and the child taking the medicine with reluctance, I introduced a funnel into the mouth, and forced down a great quantity of warm water, which had the desired effect. The matter was now determined. I was highly gratified, and the by-standers all astonished, at the sight of a table spoonful of the seeds and the thorny covering. The child, after this, improved rapidly, and in a few days was perfectly recovered."

The fourth relates to a case of Pleurisy, which threatened much danger, and continued to the ninth day, when it was completely alleviated by means of a brisk vomit.

In his last observation, Dr Bartram testifies, by the history of a case, the great efficacy resulting from dashing cold water on the extremities in cases of cholic, attended with obstinate constipation; a method first suggested in the Edinburgh Medical Essays.

XXI. An account of the sudden effects of the affusion of cold water upon the body,

in a case of Tetanus. By Dr Benjamin H. Tallman of Haddonfield, New Jersey.

After a variety of means, such as, blood-letting, the exhibition of musk, camphor, opium, mercury, &c. had been employed, the subject of this case was much worse, instead of being better; and therefore, Dr Rush was called in, who prescribed the affusion of cold water over her whole body. Her pulse was now full and soft. A large bucket of water from the river was thrown over her, which produced instantly a syncope, that lasted upwards of half an hour. When she recovered from this state, she spoke; and in half an hour more, she was able to swallow. Immediately after the syncope went off, her catamenia returned, a few days before their regular time of approaching. By means of æther, the bark and wine, in liberal quantities, she was in a few days restored to perfect health.

XXII. Case of Anthrax. By John Jones, M. D. late Vice-President of the College.

The judicious treatment pursued in this case, consisting of the ordinary means employed to procure a separation between the  
found



found and mortified parts, and of the liberal use of bark, cordials, and a nourishing diet, proved completely successful.

XXIII. Contains a State of the Thermometer during the year 1791.

The most intense cold observed that year was on the 17th of February, when the thermometer, at eight in the morning, stood at 6 degrees ; and the greatest heat on the 11th of July and 29th of August, when it rose to 95 degrees.

XXIV. Case of *Dysenteria Chronica*, cured by Alum. By Dr Michael Leib.

In this case, alum, combined with opium and bark, produced a cure, after these latter medicines, which had been used for a considerable time, had entirely failed.

XXV. An Account of one of the Causes of the *Trismus Nascentium*. By the late Moses Bartram, M. D. of South Carolina. Extracted from a Letter to Benjamin Rush, M. D.

Dr Rush, in the first volume of his essays, mentions, that the late Dr Cadwallader

Evans, who practised physic for several years in Jamaica, informed him, that he had frequent opportunities of seeing the Trismus Nascentium in black children : that he found it in every case to be incurable : that as he supposed it to be connected with the retention of the meconium, he was led invariably to purge every child born upon the estates committed to his care : and that, after he had adopted this practice, he never met with a single instance of the disease.

It does not appear that Dr Bartram has had equal success from the employment of the same means ; and, indeed, Dr Bartram's views of the nature of the disease are very different from those of Dr Evans. The mismanagement of the navel, very soon after birth, peculiar to the negroes, is, in his opinion, the source of this direful malady. After making the ligature, and cutting the umbilical cord, they very often forget to swathe or bandage the abdomen ; whence the dropping of the remaining part of the penis is retarded, the umbilicus is distended and puffed out, even with the natural moderate efforts, but much more  
when

when violent struggles are excited in crying and cholic, occasioned sometimes by the mother's milk rendered pernicious by unavoidable errors in diet, their hard fate often compelling them to food of a destructive quality. When it drops, there is commonly left a bad ulceration, both from the cause just mentioned, and the friction of loose coarse clothes. The violent irritation from this sore, even with lenient emollient dressings, in such delicate systems, seems competent to produce the disease; but how much more so, when, instead of endeavouring to abate it by such means, they augment the evil by the worst of dressings, viz. burnt rag, or burnt lint. This they invariably use. It not only suddenly constricts the ulceration, but at the same time violently irritates; the gradual depletion of the vessels is checked, they become distended, and inflammation is the consequence. When it is healed, this process is so rapid in the integuments, that the parts beneath, from a want of sufficient digestion, do not accommodate themselves, but suffer violent stretching in every effort of the abdominal muscles, which, from a neglect of the necessary pre-



caution of tight-bandaging, easily yield to any increased action of the intestines pressing against the umbilicus. Hence the very frequent tumefied navels, so many partial herniæ umbilicales, among negroes.

This opinion, Dr Bartram confirms, by an accurate account of the symptoms of the disease.

XXVI. Practical Observations on Phthisis Pulmonalis. Extracted from a Letter from Isaac Senter, M. D. to Dr William Currie.

Dr Senter is dissatisfied with the ordinary method of treatment in Phthisis Pulmonalis. He imagines that European practitioners carry the antiphlogistic plan too far. Although he despairs of ever curing the disease in certain constitutions, and in certain stages of the complaint, he thinks that, in many cases, the greatest benefit results from the frequent use of emetics, consisting of the vitriolum cæruleum, for the hint of which, he confesses himself principally indebted to the remarks of the bold, dogmatic, and eccentric Marryatt. Dr Senter observes, that when the vitriol is united with tartar emetic, as recommended by Marryatt, he  
has

has found, from experience, that it rather produced purging than vomiting. “ To prevent such an injurious operation of this medicine, he says, I now unite the ipecacuanha with the vitriol, in place of the tartar, which is peculiarly serviceable, when we wish to vomit a phthifical patient who has at the same time a diarrhœa. For this purpose, I commonly give five pills, containing from seven to ten grains of each of these ingredients, in the morning, fasting, and direct that nothing be drank to urge the emetic effect. If five or six plentiful evacuations are produced by this dose, I generally continue the same quantity in the subsequent vomitings; but if not, I increase the dose to six or more pills of the same kind. These emetics I frequently repeat every second or third day, according to the irritability of the stomach, and other circumstances of the sick, and in the mean time give as much as the stomach will bear of the antiseptic mixture of Dr Griffiths, composed of myrrh, sal martis, and sal tartar. By these medicines, he adds, I have restored to health more persons labouring under hectic fever, from glandular

glandular suppurations, than by all the other medicines and methods that I have ever read of, or tried from my own invention.” Dr Senter, considering the blue vitriol, joined with ipecacuanha, as one of the most safe and most efficacious emetics furnished by the *Materia Medica*, recommends it in every case, in preference to the preparations of antimony, on account of its not being productive of the extreme debilitating effect of these preparations. For children he uses the white vitriol, according to the recipe of Dr Moseley.

XXVII. Case of Hydrophobia. By Dr George Benfell of Germantown.

The subject of this case, a girl between seven and eight years old, became affected with the symptoms of this dreadful disease eighteen days after having been bit in the face, the arm, and ankle by a dog. The marks of the animal's teeth were scarcely perceptible in the two first of these places, and the blood was barely drawn from the last. The dog, immediately after the accident, was tied up. The symptoms of the disease proceeded



ceeded so rapidly, that the patient died on the evening of the fourth day from the commencement.

After having detailed with great accuracy the symptoms of this melancholy case, Dr Benfell adds the following remarks. “ I shall forbear to make observations on this case, any farther than to mention, that the patient had taken the celebrated medicine of Goodmans in Philadelphia, agreeably to his directions ; that eight drachms of strong mercurial ointment had been used at different periods of the disease ; that she had frequently made use of the warm bath ; and that an epispastic had been applied to the scar which remained from the only wound by which this wonderful poison could have been conveyed into the system ; that no inflammation was produced, either upon the scar or on the surrounding parts that the plaster occupied ; that she never complained of any pain in the part, before or after the blistering plaster was applied ; that the wound had not the least morbid appearance ; and that the spasms and muscular exertions were more frequent and of longer duration as the disease

disease advanced, from its first invasion to the final period.”

XXVIII. Remarks on the Effects of Corrosive Sublimate in Cancerous Affections. Extracted from a Letter from Isaac Senter, M. D. to Dr William Currie. With additional Remarks by Dr Currie.

Dr Moseley, in his treatise on tropical diseases, having recommended the use of the Corrosive Sublimate as an escharotic in the cure of cancers, it has of late been frequently employed with that view. From the experience, however, of Dr Senter and Dr Currie, as the following remarks testify, the observations of Dr Moseley are not confirmed. “ I am certain (Dr Senter observes), from my own experience of this medicine as a topical application in cancerous affections, that it is capable of doing much good in some habits, if applied with a very cautious hand, and guarded by the use of opium. But my experience convinces me (notwithstanding what Dr Moseley has asserted to the contrary), that it destroys the living, sound, and organic fibre,  
instead

instead of detaching the morbid and inorganic parts, by exciting inflammatory action. I have used the sublimite in a great variety of scirrhus, scrophulous, and fungous tumours, and several cancers, and have paid no small attention to its effects in the parts diseased, as well as in the system at large ; but I can assure you, that I have never seen a real cancer cured by it, or by any other corrosive application, either in my own hands, or when used by others.”

In addition to the observations of Dr Senter, Dr Currie begs leave to add, that he has applied the corrosive sublimite to several ulcerated cancers ; but instead of effecting a cure by it, has generally accelerated the exit of the patient.

XXIX. Case of Hydrocephalus Internus, attended with equivocal Symptoms, with the Appearances on Dissection. By Dr William Currie.

After having detailed the symptoms of the case, Dr Currie enumerates the appearances on dissection, which were the following.

On



On removing the cranium, he observed that the dura mater was not attached to it any where but at the futures, which is contrary to the assertions of both Haller and Pott.

The dura mater, as well as the external part of the brain, was free from any morbid appearance; but when an incision was made into the ventricles, between six and seven ounces at least of a limpid fluid was discharged, and received into a vessel.

He then adds the following remarks. In this case, all the symptoms mentioned by authors, as pathognomonic, (except a constant moaning), viz. strabismus, double vision, sick qualms, sudden and frequent shrieking, and holding the head with the hands, stridor dentium, were absent; nor was there that insensibility of the bowels common to compressed brain.

The particular notice we have taken of this First Volume of Transactions, we have considered to be a just tribute of respect to the industry evinced by the ingenious Members of the College.

## IX.

*Physiological Researches into the most important parts of the Animal Economy, &c. By Benjamin Humpage. 8vo, London.*

**T**HIS is in several respects an interesting work, containing various opinions very different from those at present most commonly received. The observations relate entirely to the Lymphatic System. The author endeavours to overturn a number of opinions supported by the most eminent anatomists of the age; and in this attempt he reasons from facts established by the united testimony of the very persons whose opinions he aims at subverting. We shall endeavour to exhibit, in a concise manner, a view of Mr Humpage's opinions.

In an introduction, Mr Humpage endeavours to prove, that the lacteals and lymphatics constitute, as the old anatomists imagined, systems perfectly distinct from each other. The principal argument by which he

he supports this doctrine, is founded upon the contradictory facts respecting the anatomical preparation of lymphatic and lacteal vessels, urged by different celebrated anatomists. That lymphatic vessels may be filled by air, water, or other fluids being passed into blood-vessels, is universally acknowledged; but this has generally of late been attributed to extravasation, or exudation: whereas Mr Humpage absolutely denies, that extravasation has been demonstrated in such instances, or that exudation can take place either in the living or dead body. He does not therefore allow, that the lymphatics, according to the present general opinion, are a system of vessels arising from surfaces and cavities, and terminating in the thoracic duct, but imagines that they arise from blood-vessels, and serve to convey lymph from the blood. The lacteals, on the contrary, evidently arise from the internal surface of the alimentary canal, and terminate in the thoracic duct. The most striking arguments which he adduces in favour of this opinion are, that the mesenteric glands are often diseased, or even obliterated,

as



as in old people, without the functions of the lacteals being interrupted ; and that, while the lacteals are filled with a milky-like fluid, the neighbouring lymphatics contain always a fine transparent fluid ; in other words, that the contents of the lacteals and lymphatics are invariably perfectly different. His other arguments, however, ought not to be passed over in silence.

*First*, he says, That all the glands which secrete fluids from the blood, as the salivary, lachrymal, and cutaneous glands, have excretory ducts to convey their fluids from the blood to the various parts of the body ; and therefore it is unphilosophical to assert, that the lymphatic and lacteal vessels pass through such a number of glands as are dispersed throughout the body, in order at last to get to the thoracic duct to convey fluids into the blood, when it is known, that all the glands, the uses of which are ascertained, convey fluids *from*, and not *into* the blood.

*2dly*, Various poisons produce dreadful effects in the glands, in the neighbourhood of the parts from whence the matter was ab-

forbed ; yet the thoracic duct is never affected in such a manner.

3dly, It frequently happens, that matter is carried from the head to the extremities ; which could not happen if the lymphatics terminated in the thoracic duct.

4thly, The thoracic duct is so small, that were all the lymphatics to terminate in it, it would be incapable of receiving the fluids absorbed by such a multitude of vessels.

5thly, The injecting of mercury, water, air, &c. from the blood-vessels into the lymphatics in most parts of the body, demonstrates, he observes, that the lymphatics do not terminate in the thoracic duct.

His first chapter relates to the Lymphatic Glands, and their uses. After proving the acknowledged ignorance of modern anatomists and physiologists respecting the nature and uses of these glands, he offers, as his opinion, That the use of the lymphatic glands is for the separation of the lymph from the blood ; and that the lymphatic vessels are excretory ducts to the lymphatic glands.

Mr

Mr Humpage does not adduce formal experiments. He appeals to the practical knowledge of working anatomists. Where the branch of an artery, he observes, convolutes, it forms a gland. In this part of the artery, the vein terminates, as may be seen, in many of the large glands, as in the spleen, pancreas, kidney, &c. This can be demonstrated indisputably, by injecting the artery in a part where it forms a gland; the injection will return by the veins, but not always, unless we pass a ligature round the lymphatics which come out of the gland; for if the gland be of a loose texture, it will let the mercury through its substance into the lymphatic vessels; at other times, if the gland be of a firm texture, we can inject the vein from the artery, without filling the lymphatics; but if we press the veins close, so as to stop the mercury, and make a pressure on the fluid in the artery, the eye will frequently follow the different convolutions, until it terminates in the lymphatics.

He entitles chapter second, The Introduction and Demonstration of the New Lymphatic System.



Instead of allowing that the lymphatic system originates from the different cavities and surfaces of the body, he thinks that its proper origin is the heart ; or, that it arises entirely from an extension of the arteries. Arteries, for example, form convolutions called Lymphatic Glands ; and after these glands are so formed by the artery, the same vessel immediately becomes, by divisions and anastomoses, a division of lymphatic vessels. These vessels, as they extend, become so extremely minute, as not to be possibly distinguished by the naked eye ; and in this state they unite, and form the different parts of the body ; such, for instance, as the peritoneum, pleura, mediastinum, peritoneum, adipose membrane, cutis, &c. as well as several other parts of the body which do not contain red blood, which is only confined in the arteries by the globules of blood being so large as not in health to pass through those passages which are formed for the lymph. That these parts of the body are formed in the manner just mentioned, he infers, 1<sup>st</sup>, From the examination of the skin with a microscope, by which it appears a regular  
and

and beautiful system of vessels. *2dly*, From the effect of diseases on several membranous parts, as in the tunica conjunctiva of the eye, by which millions of vessels utterly invisible appear filled with red blood. *3dly*, From the extravasation which takes place in the pleura, cellular membrane, peritoneum, &c. in consequence of inflammation, which, he alleges, is occasioned by the lymphatic vessels being left open, from the separation of the sound parts. And, *4thly*, From the difference of appearance in the skin which covers membranous parts injured by a wound or burn, &c. from that of the skin in the other parts of the body. He endeavours also to show, that there is a great analogy between the lymphatic system in animals, and the bark and leaves of vegetables. If the bark be entirely stripped off from a tree, the tree dies notwithstanding every means which can be employed; and if the passage of the lymph through a limb be obstructed, as in cases of white swelling, although the action of the artery in that limb continue as usual, the limb becomes emaciated, and daily diminished, until it be entirely destroyed. In



short, he concludes, the whole of the lymphatic system is, in old age, the reverse of what it was at the time of birth ; and when old age advances, the lymphatic glands become obliterated in many parts of the body, so as to cause the lymphatic system to cease ; a total or partial mortification takes place, and converts bones, flesh, membranes, &c. into their original matter ; and therefore, life ceases in all parts when the lymphatic system ceases to perform its functions.

In the third chapter, he treats of Absorption. After stating with accuracy the arguments in favour of, and against, the doctrine of the red veins being absorbents, a doctrine which he positively rejects, he proceeds to show, that although the lymphatics certainly do convey fluids from the blood, yet they also possess the power of absorption. This office he supposes they perform, after they have accomplished the first purpose ; that is to say, after they have conveyed the lymph to the various parts of the body, they become mere empty tubes, and absorb whatever is applied to the surface of any part of the body. According, therefore, to the de-  
gree



gree of inanition or repletion of the lymphatic vessels, Mr Humpage contends, so will the body be more or less susceptible of absorption of any fluid applied to the skin, or any other surface or cavity of the body; for he supposes the membranes of the internal parts, such as the pleura, peritoneum, cellular membrane, &c. to possess the same power of absorption as the cutis. In support of this opinion, he adduces the analogy of vegetables, which at particular times will not absorb, in such cases their absorbents being filled. He enumerates also, in further illustration, several phænomena relating to absorption that are daily observed, such, for example, as susceptibility of infection from the absorption of poisons, &c. at one time, and not at another; and he endeavours to prove, that infection in that way is always received when the body is in a state of inanition, and that, when the body is full, it often happens, that although the poison be applied, it produces no bad effect. As a corollary from his observations on this subject, he infers, that, from inanition or repletion, we can put the body in

such a state as to receive or prevent infection by absorption.

The use of the valves of lymphatics engages his attention in the fourth chapter. The generally received opinion at present is, that valves are provided, not only in the lymphatics; but also in the veins, for the purpose of preventing the retrograde motion of the fluids. Mr Humpage denies that they are intended for this purpose. His principal argument against this doctrine is, that vessels, the contents of which descend, are supplied with valves, as well as those the contents of which ascend. He imagines, that the valves are designed for more important uses; that as they are constantly placed where there is an impelling force, they are intended to resist it; and from this cause arise the different motions or circulation of our fluids. He considers this to be the use of valves in all parts of the body. If we observe, he says, where the valves are placed, we shall constantly find an impelling force; for as there is an impelling force in the stomach, and on different parts of the intestinal tube, so there are valves placed to resist it. As the chyle  
is



is pressed into the lacteals by the propelling force of the stomach and intestines, so there are valves in the lacteals to resist it. The blood is propelled from the ventricles of the heart, and there are likewise valves to counteract it; and after it is impelled into the arterial system, there are valves in the venal to resist the force. The lymph is propelled into the lymphatic system by the force of the heart and arteries, so the lymphatics have likewise their valves to resist it; and in like manner, in any other part of the body where there are valves, there is always an impelling force, and the use of the valves is to counteract it. A similar structure, too, he remarks, takes place in vegetables. The valves, therefore, are of great importance to the organs of secretion; for where the artery forms a gland, the valves are placed at that part of the vein which originates from the artery, after the gland is so formed; and the purpose of this, is to stop the fluids in that part; so that they may, by the propelling force with which they are conveyed, be urged through the glands, and be conveyed through the passages that nature has made for them. By the valves, the lymph is urged

ed



ed into all the neighbouring anastomosing branches, and by this means, if there be sufficient fluid in the blood-vessels, the whole of the lymphatic system will be filled ; and also he allows, agreeably to the general opinion, that they prevent the extravasation of the lymph through a rupture in any part of the vessel.

In the fifth chapter, he considers the separation of the lymph from the blood. In opposition to the present generally received doctrine, that the lymph transudes through inorganic pores of the arteries, he alleges, that it is secreted by a regular apparatus from the blood. Secretion, he observes, is performed nearly in the same manner throughout the whole of the animal economy. If we attend to the secretion of chyle, it will explain to us in what manner lymph is secreted from the blood.

In order to procure chyle, it is absolutely necessary to eat and drink, these being the materials from which the chyle is made ; and after the food is digested in the stomach, it is forced thence into the intestines. The chyle is then separated from the gross parts of the food, by the pressure of the stomach  
and

and intestines ; and by the assistance of the valves, it is prevented from passing through the intestines, until all the chyle be pressed through the lacteals and thoracic duct into the blood. After it has got into the circulation, the lymph is separated from the blood, in a similar manner to that in which the chyle had been before separated from the stomach and intestines ; as, for instance, the heart urges on the blood into the arteries in a similar manner to what the stomach does the chyle into the intestines. Now, before the blood can be returned from the arteries into the veins, the valves are placed in this part of the vein to stop the blood ; so that, by the pressure and force of the heart and arteries, and the resistance made to it by the valves, the lymph is urged through the glands into the lymphatics ; and by this means, every part of the body is filled by the continual repetition of the pressure of the heart and arteries, forcing the blood into the veins in the same manner as the chyle had been previously pressed from the stomach and intestines, and stopped by the valves until it had been pressed through the lacteals  
and



and thoracic duct into the circulation ; and this process is repeated until the lymph is separated from the blood ; after which, the blood-vessels become relaxed, and return to the same state they were in before repletion. Upon this principle, Mr Humpage proceeds to reconcile several contradictory observations of anatomists, respecting the appearances of the lacteals after death. He then observes, that the following difficulty may be urged as an objection to the lymph being separated from the blood through the lymphatic glands, namely, that upon drinking a greater quantity of liquids than usual, instead of their being carried off by the kidneys, they would escape into the cellular membrane, and occasion an anasarca. To this he answers, that it is not an objection that can be considered as peculiarly applicable to the system which he proposes, because, whether we consider the fluid found in the different parts of the body, to transude through the arteries, by inorganized pores, or imagine it to be separated by exhalent arteries, or whether it passes through the lymphatic glands into the surfaces and cavities



cavities of the body, the same objection is equally applicable to each of these opinions ; and it has always been considered as an inexplicable difficulty.

He offers the following reason, why it is almost impossible that a dropsy can be produced, by drinking more at one time than what we do at another. The blood-vessels will only contain a certain quantity ; if forced, they reject it by vomiting. But, suppose we should not drink such a quantity of liquid, as to force the stomach to reject it, yet we may, by continually keeping the blood-vessels filled to a certain degree, cause a continual separation of the fluids ; for we may observe on these occasions, that the perspiration, urine, &c. is in proportion to the quantity drank. Now, if it were possible for us to continue drinking in this manner for any considerable time, there can be no doubt, he thinks, that anasarca would be the consequence. Dr Hales, in his *Hæmstatics*, has satisfactorily demonstrated this to be the fact. But nature has done every thing by weight and measure, and has limited us to a certain quantity, which it is not in our power to exceed ;

exceed ; for as soon as we have drank so much as to cause any great or preternatural secretion, the fluids separated in the ventricles of the brain, cause such a compression on the cerebellum, as to take away all sensation for some time until the cause be removed, and puts it out of our power to do ourselves any very essential injury, although, now and then, there have been instances of persons getting so extremely intoxicated, that it has been fatal to them. The power of sensation does not return until the superfluous fluids have been exhausted by perspiration from the skin, lungs, urine, &c. and leaves us in a state so weak and languid, as to take away any inclination of subjecting ourselves again to a similar situation.

The separation of the lymph, then, he concludes, is caused by the pressure produced from repletion, and the resistance of it by the valves ; and an immediate separation from the blood, may be caused by any compression or contraction of the blood-vessels on the contained fluid ; and the separation will be in proportion to the quantity and

and quality of the blood at that time in the vessels, and the force of the contraction.

In the sixth chapter, Mr Humpage produces several arguments to prove, that the use of the lymph is for the nutrition of the body, and, of course, that it is the immediate cause of animal existence. He thinks, too, that the lymph is constantly liable to become changed by disease, as into simple pus, acrimonious matter, &c.

The connection of the brain with the nerves, and with the lymphatic system, is investigated by Mr Humpage in his seventh chapter. The brain, he imagines, is of a glandular structure, and performs the functions of a true lymphatic gland. This he infers, from the great quantity of blood constantly sent into it, and also from its structure. He denies that it is an organ of sensation, and urges in support of his opinion, a great variety of facts mentioned by different authors; in some cases, for example, a portion of the brain has been discharged from a wound, yet death was not the consequence. Some animals, too, who had not appeared unusually affected, have been found



to have had the brain wholly petrified. The cerebellum, and its continuation, the medulla spinalis, he considers as the source of sensation ; and from some anatomical facts, he is inclined to believe, that the medulla spinalis alone, may sometimes perform the functions of both. Having adopted as an axiom, that the brain is a lymphatic gland, he thinks that the cords proceeding from it, hitherto called nerves, are merely excretory ducts, which serve the purpose of conveying lymph to the true nerves. This opinion, he observes, will explain the contradictory assertions of authors, respecting the question of the nerves conveying fluids. The arguments he offers in support of it are, 1<sup>st</sup>, That the nerves which arise from the cerebellum and medulla spinalis, are harder than the cords, commonly called nerves, which originate from the cerebrum : 2<sup>dly</sup>, That no good reason could be assigned for the first and second pair of the spinal nerves being sent to the head ; for the continuations of the brain, if nerves, could give sensation to all those parts : 3<sup>dly</sup>, The action of certain poisons shows, that there are direct passages into the brain, independent

dependent of the circulation. He apprehends, therefore, that the continuations of the cerebrum serve to convey lymph to the true nerves, without which, these organs could not perform their functions. In proof of this, he observes, that in a common cold, producing an obstruction of the lymph, so that it cannot pass regularly through the obstructed glands into the nerves, hoarseness, loss of speech, of hearing, and smelling, may be the consequence, till the obstruction be removed; and that in consumptions, scrophula, lues venerea and fevers, where the glands become obstructed, the faculties depending on them are lost. Another argument in favour of the same doctrine, he deduces from the structure and functions of the ganglions. These organs, he considers to be precisely of the same nature as lymphatic glands. Where any of them is destroyed by disease, as by scrophula, lues venerea, &c. the parts to which the nerve passing through it is distributed, become paralytic. He therefore concludes, that paralysis may be equally produced by disease of a nerve itself, or by an obstruction of the lymphatic vessels intended.

ed to supply it. In his opinion, it is no objection to this doctrine, that the continuations of the brain are opaque, and not transparent, like ordinary lymphatic vessels, as that must be the consequence of a number of them being joined together, that they may readily pass through the neck. It is a certain fact, he adds, that if part of a nerve be cut out of an animal just dead, and placed in the receiver of an air-pump, the lymph will exude from it, and will coagulate in a similar manner to the lymph found in other parts of the body; and if we cut a nerve transversely, there will appear a number of pores, and what many authors have asserted to be cavities to convey the nervous fluid. Injections from the blood-vessels have passed through the lymphatic vessels, and have appeared to pass into the substance of a nerve; which has induced authors to assert, that they had found the cavities of nerves which conveyed the fluid; but on a careful examination of the injected nerve with the microscope, the lymphatics only were injected, and not the substance of the nerves, which appeared like so many distinct  
and



and separate fibres or threads, without any appearance of cavities.

In his last chapter, Mr Humpage exhibits, by way of conclusion, a summary view of the leading principles which he has endeavoured to establish; particularly, *1st*, That the lymphatic system does not arise from cavities and surfaces, nor terminate in the thoracic duct, but that it originates from the heart, and it terminates in all surfaces and cavities: *2dly*, That the lymphatics and lacteals are separate and distinct systems, the lacteals terminating in the thoracic duct conveying chyle into the blood, while the lymphatics separate lymph from the blood, and distribute it to every part of the body: *3dly*, That absorption is not performed by the red veins, but by the lymphatics, when from exercise, fatigue, or inanition, they become empty; in which state, they constitute a system of absorbents, conveying fluids into the blood from every part of the body: *4thly*, That the brain and its continuations are not nerves, but that it is merely a lymphatic gland, and its continuations lymphatic vessels: And, *lastly*, That sensation wholly

resides in the cerebellum and medulla spinalis, and that no nerves exist but what originate from them.

On these doctrines, so contrary to the sentiments held by every eminent modern physiologist, we will offer no remarks, but leave every reader to form a judgement for himself.

## X.

*Medical and Surgical Observations.* By Aug. Gottlieb Richter, M. D. Professor of Medicine in the University of Goettingen, &c. Translated from the German. 8vo, Edinburgh.

THE original of this valuable work was published at Goettingen, not many months ago, by Professor Richter, whose name, in consequence of former publications, has already obtained great celebrity in the medical world. And for the translation now before us, we are indebted to Dr Thomas Spens, an ingenious young physician of Edinburgh, to whose future labours, the medical practitioners of this country will, we trust, ere long, be still farther indebted.

The observations contained in this volume, are, as the author informs us in his preface, the result of twelve years observation in a public hospital. And observation



in actual practice, every candid practitioner will allow, is the surest foundation on which medicine can be improved. Although, therefore, from the remarks which he has offered on particular cases, it would appear that he still holds opinions, now very much exploded in this country, yet the facts which he relates are not less worthy of attention; and the practices which he recommends as successful, deserve at least a fair trial. Of these chiefly we shall here endeavour to give a brief view.

Dr Richter first presents us with some observations on diseases of the *mammæ*. From the two first cases it appears, that it is not always an easy matter, to distinguish carcinomatous from other kinds of tumours of the breast. The first case here related, though represented by the physician who sent the patient into the hospital, as an occult cancer of three years standing, requiring immediate extirpation, had yet, in the space of three weeks more, a termination in suppuration; and, after the pus was discharged by an artificial opening, it healed in twelve days. In  
the

the second case, a hard tumour, about the size of a small walnut, pretty immoveable, lay rather deep-seated in the substance of the breast, about an inch and a half above the nipple. The patient was desirous of having it cut out, and Dr Richter determined upon the operation. But on the evening before the day appointed, as he once more examined this lump, chiefly with the intention of trying its mobility, and as he was pressing it on both sides pretty firmly, it suddenly vanished from his fingers, and a yellowish thick milk flowed from the nipple.

This tumour, which was of five months standing, and which Dr Richter, as well as others, had mistaken for a real scirrhus, was, in reality, he thinks, a milk tumour. The patient, about eight months before, had been delivered of a child which she did not suckle.

When milk tumours and indurations suppurate, they often occasion obstinate and painful ulcers, which not unfrequently acquire a truly bad aspect. It appears, even that abscesses from milk, may sometimes happen in the breasts of men. In con-

firmation of this, Dr Richter relates the case of a young country man in the 16th year of his age, who came into the hospital on account of a swelling in his breast. As fluctuation was readily discoverable, an incision was made into the lower part of it. Upon this, a great quantity of fluid was discharged, which had exactly the appearance of the serum lactis, full of cheesy particles, but it was without any smell; and not the smallest purulency was to be discovered in it. Dr Richter was inclined to think, that this was really milk, and that the secretion was the effect of puberty.

Dr Richter has cut from the breasts of females, various painful tumours, which had all the properties of real occult cancer, with lasting success. And he here presents us with a particular account of one case of this kind. He tells us, he has laid it down as a rule, when scirrhus of the breast is not of any considerable size, always to remove the whole glandular substance of the breast, never the scirrhus alone. To this practice he is led, from the following considerations :  
1<sup>st</sup>, He believes that it is more painful to  
extirpate



extirpate a scirrhus alone, carefully and neatly, if it be firmly fixed in the substance of the breast, than to remove the whole glandular substance of the mamma. *2dly*, After the extirpation of a scirrhus of considerable size, he contends, that what remains of the substance of the breast can be of no use to the patient. *3dly*, When the whole glandular substance of the breast is cut out, the wound, he tells us, closes more conveniently, and heals more easily by the first intention, than when the scirrhus alone is carefully cut away from the glandular part; for in that case, the wound is generally uneven. And lastly, he affirms, that the recurrence of the disease after the operation, is not so much to be dreaded when the whole breast is taken out, as when the indurated lump alone is extirpated; for in such cases, although, before removal, other parts of the mamma appeared to be sound, and the disease entirely confined to the circumscribed scirrhus, yet, after the entire removal of the mamma, he has often found the whole of its glandular substance uncommonly firm, and interspersed with tendinous fibres. From this circumstance

stance alone, he thinks it must be allowed, that it is always most secure to remove it entirely in such cases, especially as it can be of no use afterwards.

Though the hæmorrhage in the extirpation of the breast be for the most part slight, and easily stopped by pressure, yet Dr Richter makes it a rule always to tie up the bleeding vessels. By this means alone, the return of hæmorrhage is effectually prevented, and thus there is a better chance of the wound healing by the first intention. In facilitating the treatment *per reunionem*, much also, he tells us, depends on saving skin. And he is persuaded, that they are much mistaken, who, by a suppuration long kept up, think to evacuate remaining carcinomatous matter. On the contrary, they do, he imagines, the very thing which is most likely to frustrate success.

Though Dr Richter records several cases in which he performed the operation in open cancers with bad success, yet he recommends it to every surgeon boldly to undertake the operation, when the local state of the disease, and the general health of the patient admit

admit of it. Dr Richter tells us, that he has applied arsenic, in cancerous ulcers of the face, with much advantage, and without any remarkable bad effect. He has tried also almost all the internal medicines which have been celebrated for curing cancer ; but he cannot praise any of them. The cicuta, he thinks, sometimes stops the progress of symptoms, renders the discharge better, and lessens the pain ; but its good effects seldom continue long. He has tried the Aqua Laurocerasi in various ways, to the extent of sixty drops ; but, after seeing it once occasion bloody urine and stools, without ever producing any good effect, he deserted the use of it. When the operation is not admissible, the physician can, he thinks, only employ a palliative mode of cure.

After some observations on Jaundice, and the Fluxus Cœliacus, Dr Richter next proceeds to treat of Diabetes. This disease appears to him to be generally of a spasmodic nature. He thinks it is occasioned by a stimulus which acts upon the kidneys, the consequence of which is, an increased, and sometimes a diseased secretion of urine. He has himself,  
he



he tells us, seen two patients cured where the disease clearly proceeded from irritation. The first was cured by vomits, the second by antimonials and the warm bath. In the last case, however, it again returned. But as some scorbutic symptoms were observable, the patient got wort to drink, during the use of which the disease by degrees disappeared completely.

The concomitant symptoms generally observed in diabetes serve to show, he thinks, its spasmodic nature and irritating cause, particularly the burning, drawing, and other painful sensations in the region of the kidneys. Even the violent thirst appears to him to be of a spasmodic nature. The spasmodic nature of the disease is, in the opinion of our author, particularly shown by its alternate increase and diminution. And lastly, he concludes, that it is of a spasmodic nature from the medicines by which it is cured. In the cure, the chief thing he recommends is, to find out and remove the irritation which acts upon the kidneys; and when this cannot be discovered, to counteract its action by sedatives and antispasmodics. Besides mentioning  
other

other medicines of this kind, he particularly recommends camphor in emulsion.

The next subject, of which Dr Richter treats, is Dysentery. He tells us, that, from extensive experience, he is now fully convinced, that dysentery does not depend upon bilious corrupt acrimonies in the intestines ; that it cannot be cured by emetics, and still less by purgatives ; but that it is a rheum, or catarrhus affection of the intestines, particularly of the larger ones ; and that the proper remedies for the disease are sedatives and diaphoretics. For this purpose, he had recourse to opium and antimony. He affirms, that by the use of opium the bilious symptoms disappeared, and the patient was cured without evacuation. Opium did not bind up the belly, but lessened the number of stools, and made them more stercoraceous.

Where purgatives seemed necessary, he had recourse to manna and calomel. Most other purgatives are, he thinks, prejudicial, but particularly rhubarb and jallap ; and he thinks he has seen several patients killed by the use of rhubarb. Neutral salts evidently,  
he

he thinks, increase the pains, unless demulcents be united with them to prevent their stimulating effects; and of all the demulcents, he has more confidence in the *fuccus liquoritiæ* than any other.

He did not find much benefit from emollient injections: they for the most part came off again very soon without any effect: they often even increased and renewed the pains. Even opium was of little use in injections; but taken by the mouth, it was the principal remedy. A soft pulse and a moist skin were the chief signs of its good effect, and of a certain amendment. These observations with respect to dysentery, are confirmed by the histories of several cases, which Dr Richter has here related.

After some observations on vomiting of blood, Dr Richter next proceeds to treat of the Hydrocele. He has always performed the operation for this disease by incision, and always, he tells us, successfully. Once only he cured this disease by internal medicines. The patient was a man about thirty years of age; the tumour was perfectly oval, and as large as a goose egg. As he could not immediately



mediately submit to the operation, the internal use of mercury was prescribed for him. He continued it for eight days without any effect; and he was then directed to employ a diuretic. From this a large discharge of urine ensued, and, to Dr Richter's great astonishment, the swelling entirely disappeared.

In treating of Epilepsy, Dr Richter observes, that the disease often continues from custom alone; and that therefore, by preventing several successive attacks, we may succeed in hindering it from ever returning. He tells us, he knows of no medicine which will so certainly prevent an epileptic fit, as a vomit given an hour before the attack. And we are here presented with different cases, from which it appears, that this opinion is not without foundation.

Dr Richter observes, that he has made use of the flowers of zinc in epilepsy, sometimes without advantage, and sometimes with a remarkably happy effect. But he acknowledges, that he cannot beforehand determine the cases, in which this medicine will have success. He gives a particular detail of one case,

case, in which it was remarkably successful.

The next subject, of which Dr Richter treats, is the Fluxus Hepaticus. He thinks it probable, that the vomitus cruentus, morbus niger, fluxus hepaticus, and hæmorrhoids, are diseases of the same nature and origin, and that they differ only from one another in regard to situation and degree of violence. If the blood issues from the upper parts of the intestinal canal, hæmatemesis happens; if from the lower parts, hæmorrhoids. If it issues from the small intestines in small quantity, fluxus hepaticus takes place; and it is the morbus niger, when old coagulated blood, or even fresh blood in greater quantity, flows into the small intestines. In proof of this opinion, a remarkable case is related, in which Dr Richter saw all these diseases, except the hæmorrhoids, in the same patient.

After a few remarks on the Fistula lachrymalis, Dr Richter next relates some cases of the Ischias Nervosa, which were cured by repeated blisters, and the application of burning cylinders, as recommended by M. Pouteau.

teau. These cylinders Dr Richter directed to be made of cotton or charpee, according to Pouteau's model, of about the length and thickness of three quarters of an inch. When the cylinder is allowed to be quite burnt to ashes upon the place, the effects of the fire never extend further than through the skin into the cellular membrane. The eschar occasioned by the burn is generally very long of separating, and the wound left after this is long of healing. Upon the whole, however, he tells us, that the employment of it is not attended with so much pain as the appearance of it would incline us to believe.

Dr Richter next gives an account of a case of an ulceration of the tongue, in which solutive neutral salts and emetics, clearing the alimentary canal, seemed to be attended with the best effects; of a case of entropium, cured by operation; of a case of angina pharyngea, which terminated in suppuration; and of a case of petechiæ without fever, which seemed to depend on bile, and where the recovery of the patient would appear to have been promoted by the use of repeated emetics.



The Bilious Fever, a disease very common in Germany, is the next subject of which Dr Richter treats. By this he understands, not only such fevers as arise chiefly or solely from superabundant or morbid bile, but also all those in which the morbid matter is evacuated, either altogether, or principally by the intestinal canal, whether by nature or by art. These, he tells us, are cured chiefly by emetics and purgatives; and he thinks, that the most proper name for them would be, Stomachic, Intestinal, or Gastric Fevers. He allows, however, that in cases of this kind, evacuants are often preposterously employed, to the great prejudice of the patient. And in the chapter now before us, he offers some observations on the abuse as well as the use of them in such cases; for which, however, we must refer our readers to the work itself.

After a few observations on amputation of the thigh, Dr Richter next presents us with some remarks on the Gutta Serena. And here, experience, he tells us, confirms him in the opinion, that the cause of gutta serena is most frequently to be found in the abdominal viscera. Accordingly, by means

of medicines which dissolve obstructions in the viscera, and evacuate, he affirms that he has not unfrequently produced a complete cure where he hardly expected it; and in some even, where the disease had actually continued for several years.

Dr Richter next relates some cases of what he calls the Mucous Consumption. From these he infers the Phthisis pituitosa to be the same in the lungs, as fluor albus in the uterus, and the gonorrhœa in the urethra. He thinks it probable, that the common cause of this phthisis is an irritation; but he does not deny, that weakness of the lungs may have some share, either as a predisposing cause, or as a consequence of it; and therefore he thinks it merits attention in the cure. Accordingly, after the irritation has been almost, or altogether removed, he advises corroborants towards the end of the cure, and particularly the *Lichen islandicus*. With this alone, he tells us he has radically cured several cases of phthisis pulmonalis which had followed bilious fevers.

After offering some observations on dropical affections, Dr Richter concludes the

treatise before us with a case of fungus articuli. The subject of it was a youth in the fifteenth year of his age, who about three months before had received a blow on his knee, which was followed by a swelling that impeded his walking. It was principally about the ligament of the knee-pan, and was most prominent when the patient stretched out his leg. The patella seemed to be uncommonly moveable. Dr Richter ordered for it the following application.

R Gum Ammon. unc. unam

    solve in Acet. Scillit. q. s. ad consist.  
    ungt. tenuior.

This was spread thick on leather, and applied over the whole knee. The application was allowed to remain for a week; and when it was taken off, a great quantity of watery glutinous fluid was observed, which had penetrated through the skin. There was not a vestige of the swelling remaining; and the stiffness of the joint, which still continued, was removed by the linimentum volatile.



## S E C T. II.

*Medical Observations.*

## I.

*Of the Effects of the Variolous Infection on Pregnant Women. By George Pearson, M. D. F. R. S. Physician to St George's Hospital.*

**I**N April 1793, I was requested to direct and attend the inoculation of the poor people in Weybridge, Walton, and other places adjacent to Oatlands. On this occasion, I had under my care two hundred and fifteen patients; who were inoculated in May and June last by Mr Norman, apothecary

cary to the family of his Royal Highness the Duke of York. I attempted to avail myself of this opportunity, to make observations with a view to determine the circumstances which render the inoculated small-pox more or less severe; for the most experienced and judicious physicians do not agree with respect to many of the circumstances which have been generally alleged to influence this disease. But the observations in the present paper, relate only to the small-pox in pregnant women.

The action of the variolous matter on the animal œconomy, is an interesting object of contemplation to the cultivators of natural science, as well as necessary to be understood by physicians. It is supposed, that the following statement of cases, and observations, may tend to elucidate a part of this subject, which has been hitherto little investigated.

#### C A S E I.

Mary Sheers, twenty-five years of age, the wife of a labourer, a moderately strong and healthy woman, had born four children, the youngest of which was two years of age.

age. According to her reckoning, she was now in the beginning of the eighth month of her pregnancy. Having been directed to abstain from much fermented liquor, and much animal food for about a week; and having during this time taken a mildly operating cathartic, she was inoculated in each arm on the 7th of May. The patient was ordered to continue to observe the regimen just mentioned, and also to expose herself much in fresh air.

On the 11th of May, the fifth day including the first after inoculation, both arms were inflamed in the manner they usually are when the infectious matter produces the small-pox. Although there was no complaint made, it was thought advisable to draw off ten ounces of blood, which was very fizy.

On the eighth day after inoculation, febrile symptoms appeared, namely, sensations of coldness and heat alternately, great lassitude, pains in the head and back, and frequency of the pulse.

On the ninth day, the feverish symptoms



were more severe; and on this day also some eruptions appeared.

The day following, namely, the tenth, the fever had almost entirely disappeared: a great number of eruptions were seen. The eruptions, in number perhaps twelve or fourteen hundred, gradually increased to their usual size, in the distinct and regular small-pox; then suppurated; and on the fifteenth day were almost all drying up. No fresh symptoms had supervened, except a little difficulty in deglutition, and a slight sore throat on the twelfth, thirteenth, and fourteenth days after inoculation.

By the twenty-third day, the scabs from the small-pox had fallen off, and the patient was quite well. Notwithstanding the number of pustules, the patient had not been confined to her bed for more than one day before the eruption; but I had reason to believe that she had not been obedient to directions, for she had kept herself in hot and confined air.

The subject of our observation continued well till the 4th of June, which was the twenty-ninth day after the inoculation, and the

the twenty-first after the attack of the eruptive fever : and then she was delivered of a full-grown dead child. To judge from the woman's feelings, her foetus had been dead four or five days before it was brought into the world.

On the 6th of June, Mr Keate and myself were at Oatlands ; and hearing that this child was born with the small-pox upon it, but that it had been buried two days ; by permission, we took up the body, in order to judge, by actual inspection, of the appearances of so curious a fact. Neither of us expecting the account given to be founded on any strong proofs, we were not a little surprised, the instant we saw the foetus, with the numerous pustules upon its skin, resembling, exactly, those of the small-pox, about the fourth day after the eruption in the favourable kind. These eruptions differed only in being flattened, from the small-pox in the living subject. There must have been, I think, in number, about four hundred. Presuming that putrefaction had begun to take place, it seemed probable, that the matter of these pustules would not be infectious :

infectious : but, as no serious consequence was apprehended from the trial to inoculate with it, Mr Keate collected a little of it upon a lancet.

Mr Keate informs me, that on Saturday, the 14th of June, he inoculated with the matter of the dead foetus, a girl of about nine years of age, from No. 42, South Molton Street. There was not the least reason to suppose she had gone through the small-pox.

Mr Keate observed, that inflammation came on in the part inoculated, in two or three days, as it usually does when the infection produces the disease : and, that on Wednesday, the 19th of June, the fifth day after the insertion of the matter, there was a pretty extensive circular inflammation, and a small vesicular tumour of the arm, where the puncture had been made. Mr Keate observed the inflammation and tumour to increase for several days farther.

On Sunday, the 23d of June, the ninth day after the infection, the patient called upon me. I could not discover any disorder of the constitution in general ; nor did I learn



learn that she had been affected by the slightest febrile complaints. There was, however, a tumour as large as a pea, full of matter, upon the part which had been punctured, and a circular inflammation about this pustule. The aspect of the arm was exactly that of a part infected by the variolous poison, where eruptions are present.

On the Tuesday following, now the eleventh day after inoculation, Mr Keate observed the inflammation to be upon the decline, and the pustule beginning to dry: therefore he conjectures that the disease was at its height the day before, that is, Monday the tenth day after infection: for, in a few days, the patient got quite well; a crust or slough leaving a scar, as after inoculation where variolous pustules had appeared. As there was no observable fever or eruption in this case, Mr Keate inoculated this girl twice within six months afterwards, and at each time two other children with the same kind of matter on the same lancet. The two latter went through the disorder in the regular way; but, on the former, these inoculations had no effect. I also again inoculated the girl on whom the matter from the  
dead

dead foetus had been tried; but, as before, no inflammation or swelling ensued: nothing followed but a red line, or red spot, for a day or two, according to the scratch or puncture that was made. In course, the only scar remaining, was from the first inoculation with the matter of the dead foetus.

Mr Keate observed, that, as in several cases of inoculation, in the beginning of June last, local effects only were produced, as above described, he could not help suspecting that the air at that time, which was during very hot weather, had some influence in rendering the small-pox so mild. On inquiry of several practitioners, and from the cases of natural and inoculated small-pox, which fell under my care during the hot weather last Summer, I was well satisfied that this disease was not more violent, but perhaps less severe than usual; provided the patients admitted were exposed to a succession of fresh, although hot air.

Perhaps it may be just worthy of notice, that the husband of Mary Sheers was inoculated, and two of their children, at the same time with herself; that he had the disease slightly, having only twenty eruptions; that one of  
the

the children had also only twenty eruptions ; and that the other child had inflammation and suppuration of the part inoculated, but no eruption, nor, I believe, fever : but we have seen, that the mother had a pretty numerous crop of pustules, as well as her foetus.

### C A S E II.

Mary Spoon, thirty-two years of age. She had six children, the youngest of which was two years old ; and supposed herself to be in the sixth month of pregnancy. She was inoculated in one arm on the 4th of June. The same regimen and medicines were prescribed as for the above patient, Mary Sheers. The inoculated part became inflamed, and swelled in the usual manner when the variolous matter applied produces the small-pox. And symptoms of fever appeared on the 12th and 13th of June, viz. on the ninth and tenth days inclusive from the day of the inoculation. The eruption began to come out on the 15th of June, or the eleventh day after the inoculation. She had a great number of pustules ; at least, fifteen hundred, or two thousand : but there was no secondary fever ; and she went through the stages of suppuration



puration and desiccation, without suffering considerably, or having any unusual symptoms.

This woman enjoyed good health during the rest of her pregnancy ; and was delivered the beginning of October of a healthy full-grown child. It was inoculated in both arms when about eight weeks old, by Mr Norman, with matter from a subject in the same room with it. The arms were in a few days seen inflamed, in the manner they most frequently are when patients are infected. The child sickened on the eighth day ; and at this time the parts inoculated were swelled, and there was a little suppuration in them. No eruption ensued. On the twelfth day, the inflammation had greatly abated, or almost disappeared. On one arm, in the part inoculated, there was a round hard scab ; and on the other arm, a crust, from the inoculated part, had floughed off, and left a cicatrix. In a few days more, the dried scab fell off from the arm on which the crust had remained longest ; and it also left a cicatrix.

As there had been no eruption, and as, unfortunately, the opportunity was lost, of taking matter from the suppurated parts, no  
other

other way remained, of determining whether the child had been infected, but that of again inoculating it. This I did, with fresh matter applied to both arms, on the 2d of January last. I examined the child on the 6th ; but, so far from any inflammation having taken place, there was scarcely a vestige of the punctures remaining ; nor was any thing seen afterwards, but a red mark in each of the parts pricked by the lancet. At this time, the scars from the first inoculation were as distinct as ever ; but no marks remained from the second inoculation.

The numerous records of inoculation for the small-pox, contain but little information concerning the effects of it in the advanced periods of pregnancy. And it seems highly probable, that not much would have been known of inoculation in the earlier periods of pregnancy, if the subjects had not concealed, or been ignorant of their being in this state. The opinion, that it is most dangerous to inoculate in every stage of impregnation, appears to be founded on reasoning, and extensive experience of the fatality of the natural small-pox, during the whole

whole time of utero-gestation. But from a pretty considerable number of instances, which I can adduce, it seems that the inoculated small-pox, within the sixth month of pregnancy, is very seldom fatal to the mother, although it very frequently kills the foetus. Hence, I apprehend, the practitioner, who should not inoculate in these states of pregnancy, under the circumstance of unavoidable exposure to infection, would be deemed as unskilful, or culpably timid, as he would be accounted ignorant, or rash, who should inoculate in the absence of the circumstance of present infection. On this ground, the justification of my practice, in one of the above two cases, is founded: namely, in that of Mary Spoon, who was a little more than five months gone with child. And, with regard to the other case, in which the woman was in the eighth month of pregnancy, although I then knew of only one instance of inoculation at so late a period, viz. a case by Mr Quier, which terminated favourably, yet I considered the practice to be justifiable; because, in about twenty cases, to which I can refer, of the natural small-

pox,



pox, under similar circumstances of pregnancy, the disease proved fatal to three-fourths or four-fifths of the women, and to a still greater proportion of the foetuses. These two cases, then, may serve as useful data in practice, in judging of the propriety of inoculation in the two last months of pregnancy.

With regard to the small-pox having taken place before birth : In one of the cases above related, the woman was delivered of a foetus with eruptions upon it, exactly like those of that disease ; and the effects of the matter of these eruptions on a person who had not had the small-pox, afforded a strong, if not an unambiguous proof, that this infectious disorder took place before birth. I remained, however, in a state of hesitation, with respect to the infectious nature of the dead foetus, until I had well considered the circumstances of the case, and compared this case with those of the same kind which are on record, or have fallen under the observation of other practitioners. The evidences of a disease being the small-pox, seem to be the following :

1<sup>st</sup>, Certain symptoms and appearances, observed only in particular stages of the disease.

2<sup>d</sup>, Certain symptoms, which occur in succession.

3<sup>d</sup>, Scars in the skin after the disease.

4<sup>th</sup>, The constitution not being, after the disease, susceptible of the small-pox from the insertion of variolous matter.

5<sup>th</sup>, The matter of the eruptions producing the small-pox in other persons.

Now, as the small-pox may take place, and the peculiar symptoms, and symptoms in succession, not be present, nor scars be left, and as the other proofs are equivocal, or not in every case present, it follows, that cases may occur, in which it is impossible to determine the question at issue beyond the reach of doubt. For, even the last proof mentioned is sometimes undecisive, as I will make appear by two instances. Mr Dawson relates, in the third volume of the Transactions of the College of London, that on the seventh or eighth day after inoculation, he took matter from the places of insertion of two children, who had no observable fever

or eruption: And, by inoculation of nineteen persons with this matter, there ensued in all of them, inflammation, eruptive fever, and apparently variolous pustules.

The two children, whose matter had infected these nineteen persons, were inoculated a second time; when, besides the usual inflammation and suppuration of the parts of the infection, a fever came on, succeeded by seemingly the true variolous eruptions, as in the most regular small-pox. Dr Leake has published a case, on the authority of Mr Head, in which variolous matter applied to himself, who had certainly had the small-pox, produced inflammation and suppuration in the part inoculated; but there was no fever or eruption. The matter, however, of this abscess produced, by infection, in a person who had not had the small-pox, inflammation, eruptive fever, and pustules, as in the most regular kind of small-pox. Dr Rush mentions an instance of the same kind in the *London Medical Observations and Inquiries*, Vol. V. p. 40.

To remove all ambiguity, seven persons were inoculated with the patient's matter



in Mr Head's case ; and they all had the peculiar symptoms and succession of stages of the regular small-pox.

If these facts had not been credited by the most judicious practitioners, because they are confirmed by their own observations, I should not have brought them forward on this occasion.

I return to my remarks on the case of Mary Sheers.

She was delivered, as hath been stated, when eight months, and perhaps two weeks, gone with child of a dead foetus, covered with pustules of such an appearance, singly considered, as probably have only been seen in the small-pox ; and I am authorised to affirm with confidence, that such pustules, in such a number, have been seen in no disease, but that which they exactly resembled, namely, the small-pox. Strong confirmation that these were variolous pustules, is afforded by the circumstance of the mother having had the small-pox at such a period before parturition, as to have infected the foetus, and for the disease in it to have made the progress manifested by the appearances on its body ; assuming, however, that the stages

stages and periods of the small-pox are the same in the womb, as in the natural way, in the air.

The variolous nature of these eruptions in the dead child, is further proved by analogous cases ; for such pustules, and in such a number, have been seen on the birth of the foetus *only*, in those cases where, like the present, the mother had a short time before certainly had the small-pox.

Farther evidence is afforded by the inoculation with the matter of this dead child. And, if the effects were not such as to remove all ambiguity, there having been no observable fever or eruption, they were at least such, as to yield a strong confirmation of other proofs.

Supposing the foetus, in this case, to have had the small-pox before its birth, and that the progress of it was as in the natural way, the child could not have been infected by the matter with which the mother was inoculated, but might by the infection generated by the constitution of the mother. It does not seem unreasonable, or inconsistent, to calculate, that the foetus was infected on

the first day of the eruptive fever of the mother, which was the eighth day after inoculation ; that in ten days farther, its whole constitution was affected by the eruptive fever ; that during two days more, the eruptions came out ; and that it lived four days after the first appearance of the eruption. The child, therefore, probably, died on the sixth day after its constitutional affection, and the twenty-sixth day after the inoculation of its mother, which was the 31st day of May, or 1st of June ; and after remaining four days dead in the womb, it was brought into the world, in the condition above described.

Although, in the case of Mary Spoon's child, we had not the decisive, and unequivocal proof, of the constitution being infected, from the appearance of variolous eruptions, the other proofs leave very little doubt that the small-pox was really produced by the first inoculation : for inflammation ensued in the usual manner and time, as in the small-pox ; and tumour and suppuration followed, by scars in the inoculated parts, as well as febrile symptoms, probably on the  
eighth



eighth day. This fucceffion very rarely, or perhaps never, happens, except in the fmall-pox, whether eruptions be prefent or not. But our doubts are almoft all removed, by the variolous matter being applied twice afterwards, without producing any effect. We may add, as a farther proof, that there is not on record a fingle well authenticated cafe of the fmall-pox taking place in the uterus in the fixth month of pregnancy.

How very flight the fmall-pox was in this infant ! All, however, but one of the reft of the family inoculated in June laft, had it with rather fevere, and fome of them with dangerous fymptoms. At that time, this infant's mother had a thoufand, or more puf-tules ; its fifter, aged two years, had perhaps as many ; another fifter, four years of age, had above two thoufand eruptions ; a brother, aged feven years, had above five hundred puf-tules ; another brother, eleven years old, had only about twenty-one puf-tules ; a fifth child, a fifter, nine years of age, had a thoufand, or more ; a fixth child, a fifter, fix years old, had five hundred, or more ; the father, aged thirty-fix years, had

only twenty eruptions, but was very ill above a week before, and during the eruption, so as to be unable to continue his employment as a labourer.

On the presumption that the subject of the present paper may not be uninteresting, I shall, in the next place, give a brief statement, with some remarks, on the cases which are recorded, and which have fallen under the observation of my medical friends, as instances of the infection of the unborn fœtus with variolous matter. For, by bringing the whole, or the greater part of the facts relative to this subject into review, the judgement may be exercised with more ability on the cases I have related, and on the question, Whether, and under what circumstances, the fœtus in the womb is susceptible of being infected?

#### C A S E I.

Amongst the epistles of Bartholine, is one written in 1657, containing the following case, which I relate in the author's own words :

“ Mulier

“ Mulier 38 annorum paupercula, cum uterum gereret, et in alvo materna foetus adhuc instrueretur ad exeundi patientiam, de gravitate totius corporis conqueritur, premittitur pandiculatione, cordis palpitatione, pruritu narium, &c. erumpunt variolæ in corpore undique : mox cum instaret partus hora, infantem edit variolis per tenerrimum corpus æque tam multis contaminatum ; qui, post fani bap̄tismatis acceptum sacramentum, obdormiebat : mater autem tertio die post exhibat mortalitatis sensus.”

*Remark.*—It is not at all probable, from experience, to suppose, that in this case both the mother and child had a disease resembling the small-pox, but which was in reality a different disease. The fatality of the natural small-pox, in the last month of pregnancy, both to the mother and child, is confirmed by subsequent experience. The foetus was born with the eruption upon it, and therefore it was infected in the womb. But the observation is too defective, or the account in words of too vague a meaning, to know precisely the stage of the disease of  
the



the mother and child at the time of parturition. This remark applies also to a case of the same kind by Hildanus, another by Dolæus, and that by Fernelius ; and yet another by Castro.

### C A S E II.

In the year 1713, Mr Derham, F. R. S. upon the authority of a midwife, gave an account to the Royal Society (Philosophical Transactions, vol. XXVIII. p. 165.) of a woman, who, when in a very advanced state of pregnancy, had the natural small-pox very mildly ; but, while taking strong purgatives, as soon as the disease was over, the foetus, according to her feelings, died ; and in five days after its death, she was delivered of a dead child, whose skin had upon it a vast number of the suppurated small-pox.

*Remark.*—The small-pox eruptions, when very numerous, and full of matter, are so very unlike any other known disease, as not to be easily mistaken by a nurse or midwife ; and the delivery took place after the disease in the mother, consistently with the action  
of

of the infectious matter upon the foetus, as in several other cases.

### C A S E III.

An account is given, in 1749, by Dr Mortimer, Sec. R. S. (Philosophical Transactions, vol. XLVI. p. 233.) of a lady who, when within a fortnight or three weeks of her reckoning, had held a conversation, at the distance of thirty or forty yards, with a person then in the small-pox, in the state of maturation. In a fortnight after this interview the pregnant lady was delivered, and her infant was in a day or two covered with eruptions, which proved to be the small-pox, of which it died before the period of maturation. The mother had no complaint or eruptions; and she had had the small-pox long before.

*Remark.*—I apprehend that practitioners in general will not conclude, that in this case the foetus was infected in the womb; because many hundreds of pregnant women in England yearly are exposed to the influence of the variolous infection, under much more favourable

favourable circumstances for its action, than in the present instance ; and yet there is no parallel to this case, I believe, upon record, nor has any parallel been heard of. Besides this, the eruptions had not suppurated, and perhaps were not numerous. They might probably be from a different disease ; or if from the small-pox, the source of the infection was not that alleged. Much as this case stands in need of confirmation, the authority for it was so respectable as to require my notice.

#### C A S E IV.

In 1747, Dr Mead, in his treatise *De Variolis*, relates the case of a lady, who, in the seventh month of her pregnancy, had the small-pox. On the eleventh day of this disease she was delivered, and her infant, when four days old, had a fever with eruptions, which Dr Mead concluded was the small-pox, although it died the evening of the first day of the eruption.

#### C A S E V.

Dr Mead, in the publication just mentioned, informs us (from memory), that a  
woman,



woman, towards the close of her reckoning, (who had long before had the small-pox, but after attending, during pregnancy, a person in this disease), was brought to bed of a dead fœtus, covered with variolous pustules.

*Remark.*—For reasons given in the remark on Dr Mortimer's case, this also stands in need of confirmation : and we have a better right to arraign the accuracy of Dr Mead ; because, in the same page in which he states this case, he misunderstands, or misconstrues, a case of Mauriceau, with regard to a child going through the small-pox in the womb, as remarked already by Sir George Baker.

#### C A S E VI.

In 1749, Sir William Watson (See Philosophical Transactions, vol. XLVI. p. 239.) published the case of a woman far advanced in pregnancy, who had laboured under the small-pox a long time before, who, during this pregnancy, performed the duty of a nurse to her servant in the natural small-pox ; and in a month after this attendance,

was

was brought to bed of a child that had about forty scars upon its body, like those from the small-pox. This child (a girl), and her brother, were afterwards inoculated at the same time. The brother had inflammation of the parts inoculated, eruptive fever, and eruptions, as in the most ordinary small-pox; and the girl, born with pits on her skin, had inflammation and suppuration in the parts inoculated, in the same manner as her brother, and a general indisposition, as in the undoubted cases of small-pox, but no eruptions. Sir William concludes, that this girl had gone through the small-pox before her birth; and Camper and Van Swieten coincide with him in this conclusion.

*Remark.*—I confess that I cannot coincide in opinion with this most experienced and accurate observer. But his own observations, I trust, afford me ample justification. In his excellent tract on Inoculation he observed, and the observation might be confirmed by almost every person of experience, that he had had “scores inoculated a second time without effect, where there had been

been only *one* pustule, or where, *without pustules*, the punctures have been turgid and inflamed; and in no one instance was there a subsequent eruption; nor have the punctures a second time put on the appearance they did at first, but have always healed, as such slight punctures usually do, when no variolous matter has been inserted." Now, these very appearances, without eruptions, took place in the child born with scars upon it; and as such scars are produced by several other diseases besides the small-pox, of which an instance fell under my own observation a few days ago, I am compelled to conclude, that it was most probable the fœtus had not the small-pox before birth, but had by inoculation afterwards.

#### CASE VII.

The next case I have to mention, is also furnished by the observation of Sir William Watson. A woman, on the ninth day of the natural small-pox, was delivered of a child, which, on the eighth day after its birth, had variolous eruptions: therefore  
the



the author concluded, that it had been infected by the mother while in the womb.

*Remark.*—This seems to be the most reasonable conclusion, because subsequent experience has shown, that, except by inoculation, the infection scarcely ever acts upon the constitution in general in the space of eight days after its application.

#### C A S E VIII.

Dr Rosen von Rosenstein, has related, that, about the year 1756, a child had crusts and scars of the small-pox upon its body, when it was brought into the world; for the eldest son had the small-pox a little before this was born. All the other children got the small-pox six years after that, except this, who certainly had had the infection already in its mother's womb.

This case is so very ambiguous, that I should not have stated it, if it had been related by a less respectable physician than Von Rosenstein.

## C A S E IX.

Baron Dimfsdale, in his Treatise on Inoculation, in 1766, states, that a woman with child was inoculated, and had a small crop of pustules; that in nine weeks afterwards she was brought to bed, at the full time, of a living child, with distinct marks of the small-pox upon it.

*Remark.*—Perhaps it may be regretted, that our doubts were not removed by inoculating this child.

## C A S E X.

In December 1776, the case of Mrs Ford occurred, which is stated by Mr Wastall, and communicated by Mr Hunter in the Philosophical Transactions, vol. LXX. p. 128. The small-pox seized this woman when far advanced in pregnancy; and on the twenty-third day after the eruption, she was delivered of a dead child, covered with eruptions, which Dr Leake, Dr Hunter, Mr Hunter, Mr Cruickshank, Mr Falconer, and Mr Wastall, considered to be the small-pox in the state of suppuration. Dr Hunter, it is stated,

thought the eruption so like the small-pox, "that he could hardly doubt;" but said, "that in all other cases of the same kind he had met with, the child in utero escaped the contagion."

This case is very similar to that of Mary Sheers, which fell under my observation; but her's was the inoculated small-pox, and Mrs Ford's the natural sort.

#### CASE XI.

Is that published in 1781 (Philosophical Transactions, vol. LXXI. p. 372.) by Dr Wright. A negro woman, a fortnight after the eruption of the small-pox in the natural way, was delivered of a child with eruptions like those of the small-pox on the eighth or ninth day in favourable cases. The child had many eruptions, and died in three days. The mother had a very small number of pustules, and soon recovered.

#### CASE XII.

In 1781, a case was published by Dr Bland, in the London Medical Journal, vol. II. p. 205. of a woman who, in the  
seventh



seventh month of pregnancy, had the confluent small-pox. Six days after the turn, and eighteen days after appearance of the eruption, she was delivered of a dead child, covered with the small-pox, full of matter, and seemingly arrived at maturity. The mother supposed her child had been dead five or six days before the delivery.

### CASE XIII.

In 1784, a case was published in the Medical Journal, vol. V. p. 399, from Mr Roberts, of a woman who was inoculated in November 1783. She was in the ninth month of pregnancy. The infection took place with the usual appearances. When the eruptions were drying up, she was seized with rigor and other symptoms, and felt as if the child then died, of which she was delivered the day after, as was expected, dead, and also covered with seemingly variolous eruptions.

### CASE XIV.

In a general inoculation at Painfwick, in 1785, of which there is an account in the

7th volume of the Medical Journal, a woman, nearly eight months gone with child, had the inoculated small-pox. In about four weeks from the time she was inoculated, she fell into labour, and brought into the world a dead child, with about thirty pustules upon it. The fœtus, according to the feelings of the mother, had been dead five or six days.

#### C A S E X V.

The account of this case, by Mr Lynn, was read at the Royal Society in February 1786; but the Committee not thinking proper to publish it, this valuable, and perhaps only decisive instance of the small-pox in the womb would have been unknown by the public, if Mr Lynn had not printed his paper, in August 1786, as read at the Royal Society. The fact in this case is also truly satisfactory, because it is attested by a man distinguished for superior accuracy and skill in his profession. I shall give the account of this case in the author's own words, as any other representation of it would be less honourable to him, and less useful to the public.

“ In

“ In November 1785, the wife of Mr Eve, a coachmaker in Oxford-Street, being then in the eighth month of her pregnancy, was seized with rigors, pain in the back, and other febrile symptoms. In two days time, the disease showed itself to be the small-pox; and though the pustules were of the distinct sort, yet they were uncommonly numerous. On the eleventh day, they began to turn; and on the twenty-second day her labour took place, which, according to her reckoning, was a fortnight before the regular period; that is, when she was advanced in her pregnancy eight months and two weeks.

“ The child, at the time of its birth, was covered with distinct pustules all over its body. They did not appear to be full of matter till three days after; at which time I took some of the pus upon a lancet, from one of the pustules on the face. With this lancet I afterwards inoculated, on the 2d of December 1785, a child of Mr Chaters, in Church-Street, Soho, in both arms. On the 7th, the inflammation began to appear in each arm, and continued daily increasing till the 11th of December, when the



child sickened, and was affected with all the symptoms which usually precede the eruption. On the 12th the sickness and fever abated, the pustules of the distinct sort of small-pox made their appearance, and the child, having regularly gone through the several stages of the distemper, was perfectly well in three weeks."

As in all the decisive cases I had collected, except Mr Lynn's, the child was born dead, or died soon after birth, I was desirous to see the subject whose case is just related; but, on inquiry, I found it also died about the fifth day after its birth; an event which it was not thought necessary to notice in the account published.

#### C A S E XVI.

In Dr Haygarth's work on the small-pox, lately published, mention is made of a woman who was seized with the small-pox in the ninth month of pregnancy, and who, "not long after," was delivered of a dead child, that had distinct variolous eruptions over its whole body.

C A S E

## CASE XVII.

By permission of Dr Woodville, Mr Wackfel, apothecary to the Small-pox Hospital, was so obliging as to show me a foetus, preserved in spirit, which has apparently variculous eruptions upon it. This child was born dead, by a woman in the eighth month of pregnancy, about a fortnight after she had got well of the inoculated small-pox.

Besides the above cases, which are on record, or which I have seen, I know of several more of the same sort, which have been communicated to me by medical practitioners.

## CASE XVIII.

Dr Ford of Bond-Street informs me, that the case of Mrs Marsh of Bristol fell under his observation. When in the eighth month of her pregnancy, she had the natural small-pox very severely; and soon after she had gone through the disease, she was delivered of a dead foetus, with such appearances, as no one among the number of practitioners who saw the child could doubt to be the

small-pox. The eruptions, in this instance, appear to have been dried.

### C A S E XIX.

Mr Jones of Mount Street, on whose accuracy and fidelity I can safely depend, saw the case of a woman who was inoculated when seven months gone with child. Soon after the eruptions, which were few in number, had dried up, she was brought to bed of a dead child, that had a numerous eruption of pustules, which were quite flat, but which, he thinks, no one could doubt being those of the small-pox.

### C A S E XX.

The same practitioner had a woman in the natural small-pox, with very numerous eruptions, under his care, who was in the eighth or ninth month of pregnancy. While the disease was going off, or in the stage of desiccation, she was delivered of a dead child, with a number of quite flat eruptions, which he judged to be most certainly variolous,



## CASES XXI. and XXII.

Dr Hoffack, an ingenious young physician from Philadelphia, who was recommended to me by Dr Duncan, and is now attending lectures in London with great assiduity, has favoured me with the two following cases, in a letter, dated London, March 22d 1794.

“ In the Summer of 1791, the small-pox was, by accident, introduced into the town of Alexandria, State of Virginia. As soon as observed, most of those who had not had the disease, were inoculated; about 900 in all.

“ Notwithstanding the great heat of the weather, in the month of July (the thermometer, upon an average, at 12 o'clock in the day, about  $90^{\circ}$ ), the disease in general proved so mild, that it became a prevalent opinion with several physicians, that Summer, although it had been hitherto so much dreaded, was the most proper season for inoculation.

“ Among other facts of importance upon this subject which presented, (and which will, no doubt, shortly be published by Dr  
Dick,

Dick, a present eminent physician at Alexandria), two cases occurred of the small-pox affecting the foetus in utero, producing miscarriages.

“ The first was a lady, in about the fifth month of her pregnancy. As she was exposed to the infection, she submitted to inoculation. The disease, as usual, was so mild, that she scarcely experienced any inconvenience from it, having but a slight fever, and very few pustules. Notwithstanding the apparently favourable termination of her disease, about a week after her recovery, as it was thought, that is, about four weeks from her inoculation, she felt a weight and uneasiness at the lower part of her abdomen; and the motion of her child ceased. In this state she continued about three or four days, when she was taken in labour, and delivered. The child was dead, but had no appearance of putrefaction. The skin was thickly covered, but with distinct spots, which every person who saw the child, (among others, were two medical gentlemen), pronounced to be the small-pox. The mother experienced no  
bad

bad effects from it, but in a very short time recovered.

“ The second case was a lady, who, from an apprehension of danger, both to herself and child, declined inoculation, expecting to escape the disease altogether. But she, unfortunately, received the infection in the natural way. She was in about her seventh month of pregnancy, of a good habit of body, and had enjoyed good health. The disease, however, proved of the confluent species, and very violent. In the last stage of it, when the pustules were drying away, she observed the motion of her child ceased, and felt it as a heavy weight, occasioning some uneasiness, and a bearing down. Notwithstanding this unfavourable circumstance, the mother continued to get better; was free from fever, and the pustules dried away quickly. In short, so favourable was her situation, that I still could not give up all expectation of her child's safety. In this anxious state she continued, (in the meantime, even attending, in some measure, to the offices of her family), until about three weeks from the time she first perceived the motion



motion of her child to cease. She was then taken in labour, and delivered of a dead child. It smelled extremely fetid ; and appeared to have been dead a considerable time. Its whole skin was thickly covered with small dirty-coloured spots, which could not, under the above circumstances, have been any thing but the small-pox ; and which would have been pronounced such, by every person who had ever seen small-pox in any of its forms."

#### OBSERVATIONS.

From the very small number of instances in which the foetus in the womb appears to have been infected, amongst the great number of pregnant women affected with the small-pox, we may safely conclude, that this disease, in such cases, very rarely extends to the foetus. The proofs of the fact, upon which this conclusion is founded, are from the children of such women having the small-pox after birth ; and from the absence of eruptions in abortions constantly before the seventh month of pregnancy ; and generally, in premature births, at a later period.

From

From the very small proportion of persons who are supposed to be not susceptible of the action of the variolous matter, although their mothers, while pregnant, who had already passed through the small-pox, were exposed to the influence of this poison, and from there not being a single satisfactory proof of this disease in the womb of such women, it may reasonably be doubted, whether the small-pox ever takes place in the uterus, except from infection generated by the mother.

In all the above cases of the supposed small-pox in the womb, in which the disease appears to have been communicated by the mother's infectious matter, the time of the action of the infection in the foetus may have been the same as in the natural small-pox in the air; which may reasonably be supposed to be the case: because, under both circumstances, the variolous poison is probably conveyed into the constitution along with the aliment; whether that be *oxygen*, which enters by the way of the lungs, or *animal* and *vegetable matter*, which enters by the way of the alimentary canal.

It

It appears from the above cases, and others on record, that the natural small-pox in pregnant women, is fatal in at least nineteen out of twenty cases to the foetus in the womb, and to three-fourths, or four-fifths of the women. Nor is there, perhaps, a single decisive instance, of a patient going through the disease in the womb, and being afterwards born alive. It is not even clearly proved, that a child, born with the small-pox, has survived this disease.

On what circumstances this fatality to the foetus depends, we know not ; but it is obvious to suspect three : viz.

1<sup>st</sup>, The foetus being immersed in a liquid.

2<sup>dly</sup>, The small quantity of oxygen taken into its constitution, and that only through the intervention of the mother.

3<sup>dly</sup>, The temperature of the surrounding medium of fluids and solids, being  $97^{\circ}$  or  $98^{\circ}$ .

It is particularly worthy of notice, that the foetus, in the womb, dies with a smaller number of eruptions upon it, than scarcely ever happens from this disease after birth.

There



There are some facts to show, that it is probable, a very small proportion of pregnant women die by inoculation, although the foetus generally is destroyed. All calculation is liable to much inaccuracy in the present state of facts; but in about forty cases of pregnant women inoculated in almost every stage of pregnancy, which I could state on the authority of Sir George Baker, Baron Dimsdale, Dr Ingenhousz, Dr Woodville, Mr Wackiel, and from the above cases, one died, as stated by Sir George Baker to have happened in the sixth month of pregnancy: but, I am sure, not one in a hundred dies at earlier periods of pregnancy than seven months.

There is no reason to suppose, that the mother's constitution is at all disordered by the small-pox of her foetus, although premature labour and parturition are very liable to come on during the disease of the mother.

It appears from the above cases, that the disease in the mother and foetus are not always in the same degree: for that, in some cases, the mother has the disease severely, and very numerous eruptions; but the foetus

tus has a small number of eruptions. And, on the contrary, at other times, the mother has the disease slightly, and few eruptions ; but the foetus a great number of pustules.

If it be allowed, that the above statement of instances of small-pox in the womb, establish the fact, that the foetus is not infected by the variolous matter that infects the mother, and that the foetus is never infected but by variolous matter generated by the mother, it seems highly probable, that this fact will be frequently referred to in physiological and pathological reasoning.

LEICESTER-SQUARE,

May 1794.

## II.

*A Cancer-like Case of the Uterus cured by a Course of Mercurial Antimonial Pills. By Mr Robert Bishoprick, Surgeon, York.*

March 30. 1785.

**M**ARY C——ll, of the parish of St Mary's, Castlegate, in the city of York, a married woman, aged 36, informed me, that in June 1782 she conceived, and in December following miscarried; that during her pregnancy she had sometimes considerable pain between the dorsal and lumbar vertebrae, and at other times was tolerably easy; but that soon after her miscarriage, the pain in the back not only became more constant, but likewise progressively increased, until September 1783, when it was accompanied with a sensation of a tumor pressing upon the rectum, which occasioned frequent abortive motions to stool; and in December following there came



on likewise a fetid discharge from the vagina, which continued progressively augmenting until last October, when she applied to me for advice.

At that time the discharge amounted to two teacupfuls in twenty-four hours, and was not only extremely fetid, but had a dark green and sanious appearance.

On examining the private parts by the touch, I found the vagina natural, but felt a scirrhus induration and enlargement of the os tincæ and some part of the womb adjoining it. The mouth of the womb seemed irregular and jagged ; and the womb itself, on positing it with my finger (the patient standing upright), I conceived to be about the size of a goose's egg. She complained of frequent motions to stool, attended with a certain degree of tenesmus, although the stools were seldom loose, and she had a constant sensation of a swelling, pressing against the strait gut, which seemed to be the occasion of those false motions.

She said she had frequent paroxysms of springing, burning, gnawing pains, which by her account seemed to be situated about the mouth

mouth of the womb, and which had continued gradually growing worse for a considerable time ; and also that she had frequent forcing pains, like labour pains, which generally increased the discharge of fetid matter.

At other times, the forcing pains would be attended with a considerable discharge of blood, which sometimes appeared black and grumous, and somewhat like decayed flesh ; and the foetor of the discharge in general was so bad, that it was difficult for any one to stay in the room with her.

Her appetite was much impaired ; she had only been able to take liquid food for several weeks, and had lost much flesh and strength.

On my inquiring after the character and conduct of her husband, and whether she had any reason to think he had lately, or at any time injured her health ; she told me, when she was first married, which was several years ago, that her husband had infected her with the venereal disease, but that she soon took medicines for it, and was cured ; and she believes that he has never injured

her since ; but as he is liable to be intoxicated now and then, she cannot be certain that he has never given cause for a repetition of the injury.

I prescribed for her the following mercurial antimonial pills, which are a good deal similar to those which have been recommended by Professor Plummer, in the Edinburgh Medical Essays, directing one to be taken twice a day for a week, and then three times a day for a fortnight.

R Sulph. Aurat. Antim. Ph. Lond. 1746.

Calomel. ppt. singulorum unciam dimidiam, misce et simul diligenter tere in mortario marmorio per horas duas.

R. Pulv. Merc. Antim. præscript. Elect.

Mithridat. singulorum scrupulos duos.

Misce, fiat Massa in Pil. xxxx. dividenda.

She was also ordered to take from twenty to thirty or forty drops of liquid laudanum every, or every other night, for the purpose of mitigating pain, and procuring some rest. The pills proved gently laxative, and by the end of the third week her mouth began to be sorish, and she spit about a teacupful of saliva



saliva in twenty-four hours. The pills were then directed to be taken two or three in a day, so as to keep up the spitting, to the same quantity for a month ; during which, the symptoms in general began to abate. The spitting also gradually abated, although she took generally two, and sometimes three in a day for many weeks ; the pills being taken in all for twenty weeks, during which (exclusive of the slight salivation for a month) the gums were rather sore and tender most of the time.

I did not examine the os tincæ above three or four times after she began the use of the pills ; and the symptoms, as has been already observed, not only became better in general during the salivation, but by the time she had taken the pills eight weeks, I found the enlargement, induration, and uneven edges of the mouth of the womb altered much for the better, as also both the quantity and quality of the discharge. In twelve weeks (*i. e.* four weeks more), all the symptoms were so much relieved that she got out of doors ; and in another month, all the symptoms had apparently vanished. The

os tinæ felt natural, smooth, and soft; the size and weight of the uterus materially lessened; no discharge of either fetid or discoloured matter, and no burning or springing pains. I advised her, however, by way of security, to continue the pills a month longer, which she did, with the same operative effects as before, and continued free from the disease.

She was confined to her bed for near fourteen weeks, a month of which was before she took any medicines, and near ten weeks after, and was more than a fortnight longer before she got out of doors.

The occasional use of liquid laudanum both mitigated her pains and procured some necessary rest. Before, however, she was enabled to lay it aside, she found it requisite to increase the dose to eighty, ninety, or a hundred drops, in order to obtain the desired effects.

*July 1. 1793.* I have seen the patient lately, and on inquiring after her health, I find that she has had no relapse of her disease, but has in general enjoyed a tolerable  
good

good state of health. This account was corroborated by an examination of the os tincæ and parts adjoining, which I found exactly in the same state as when she gave over taking medicines in the year 1785.

From the time she felt the sensation of a tumor, in September 1783, which appears to have been the enlargement of the pendulous parts of the uterus, as has been already described, she says she could not permit any connubial connection without some degree of pain and uneasiness, which gradually increasing, such connections became totally inadmissible during five months when she was at the worst.

The chief inconveniences which she labours under as consequences of her disorder, are, that her menses, which were regular both in time and quantity before the miscarriage, have, since her recovery, been more copious, and have been very irregular in point of time, recurring at three, five, six, or eight weeks interval; that she has more frequent motions to urine than she had before; and that she feels a slight degree of pain and tenderness of the strait gut, or



parts adjoining it, whenever she has either a costive or several loose stools.

This poor woman appears to be possessed of ideas somewhat above the level of her situation, her husband being only a working man: for she not only expresses her gratitude to Providence for her recovery, and her obligations to me for my gratuitous assistance, in the strongest terms, but has repeatedly requested that I would publish her case, as an example of a successful cure of a cancer, for the good of mankind. And from the same motive she informed me the last time I saw her, that she had decisively settled it with her friends, that if I should happen to survive her, that they should send for me to open her body, in order that, by a further examination, I may give the world a more complete history of her case.

## III.

*An account of the Effects of an over-dose of the Terra Ponderosa Muriata. Communicated to Dr Fowler, by Mr A. Mather, Surgeon, York.*

THE following case affords an instance, which may not speedily recur, of the pernicious effects of an over-dose of terra ponderosa muriata. It is drawn up with so much perspicuity and accuracy by the gentleman who was the subject of it, that I cannot add any thing to it in these respects. I shall only premise, that he was subject to frequent attacks of colic, and in the interval thought his stomach much strengthened, and the motion of the bowels duly regulated by the terra ponderosa muriata, in doses of 10 or 12 drops, three times a day. These effects I had observed before in similar cases, and therefore, recommended the use of the medicine to him. As he lived at a  
consider-

considerable distance from me, I sent him an ounce-phial of it at a time, with cautionary directions respecting its use. These, however, in a moment of inattention, he had forgot. I conjecture, he must have taken at that time about 70 or 80 drops; having taken, by his account, the sixth part of an ounce. The consequences which followed are, I think, worthy the notice of the Faculty.

If you will transmit them to Dr Duncan for insertion in the Medical Commentaries, you will confer an obligation on, Sir,

Your sincere friend,

and humble servant,

*York, August 26th.* A. MATHER.

*To Dr Fowler, Physician, York.*

DEAR SIR, *Freston, 2d March 1792.*

Well acquainted, as I doubt not you are, with the use of the stomachic drops you gave me, you probably may not have had an opportunity of observing the effects of their abuse. As a matter of professional curiosity, I perhaps may give you some information on the subject.

About



About a fortnight ago, or somewhat more, I had an attack of the colic; and after I was relieved, I applied to the drops. I took them every day; but only once each day, and 10 drops at a time. On Thursday night, I took what was meant to be the usual quantity, but found from the excessively strong taste, I must have made a mistake. I happened to have looked at the bottle just before I dropped them out, to observe how much remained. When I looked again afterwards, on account of finding the taste so strong, I perceived I had diminished them half an inch in depth, certainly rather more than less. They instantly produced their usual effect of making me squeamish. In half an hour's time, (about 12 o'clock), I began to be violently purged without griping, and, at the same time, began to be very much relaxed. This continued till about 2 in the afternoon, by which time, I could only crawl along with the assistance of the furniture and walls; my knees, and particularly my right, was first seized. When the purging stopped, it was succeeded by vomiting, which continued till about 8 o'clock. The discharge

charge was not great, but very nauseous, both in taste and appearance. I took some warm camomile tea ; but that came off directly, and pure. About 3, I was helped up to bed. The use of my limbs was gradually taken from me, before 9 in the evening. I could not produce the least possible motion, in any joint or limb about me. The last part I lost the use of was my left hand. The strokes of my pulse, so long as I could feel them, and afterwards, when an apothecary in this neighbourhood, for whom I sent, felt them, were regular, and as in the usual state of my health. My feet were deadly cold, though continually wrapped in heated flannels. The apothecary was sent for in the evening, and was with me about 8 o'clock. I told him what I apprehended to be the cause of my complaint, and what I understood from you the medicine was. He seemed to doubt whether it could produce the effects : he ordered me nothing of medicine that night. The people about me were then preparing me a bed down stairs : he directed hot bricks to be applied to my feet, as soon as I was removed, and that they should give me



me some gruel with brandy in it. After I was got to bed, my feet began to burn, and my whole body to perspire freely, but not profusely; and continued to do so through the remainder of my illness. I could not sleep any part of the night; and was very uneasy in every posture in which I could be placed. You may judge of my utter debility, when I tell you that, in being served with some toast steeped in gruel, a crum passed the wrong way, and yet with the utmost effort I could not make the least cough to throw it back again. The apothecary still, however, thought my complaint could scarcely be caused by the *terra ponderosa muriata*, but seemed disposed to consider me in a rheumatic fever. He told me, he should send me a mixture to continue and promote the perspiration, which had broken out.

About 2 o'clock on Friday afternoon, I perceived some little strength in a finger, and some of my toes. About 5 o'clock, I was sensibly amending; and at 10 o'clock, when my bed was made, I could put part of my own clothes on, and walk without assistance over the floor, from and to the bed.

On



On being got to bed again, I took the apothecary's medicine for the first time; the basis of which, if I may be allowed to pry into the mysteries of medicine, I conceive to be tincture of guaiacum, which directly brought on the perspiration, that had been rather checked by getting up. That night I rested well; and the next day felt no complaint, except a sensation of weariness in the muscular parts of my body, very like that which follows the day after a hard journey. I am sensibly thinner than I was, but feel no remains of my complaint. My speedy recovery left me no doubt about the cause of my complaint. But I shall not be terrified by it from using this valuable medicine. I brought my bottle very low, and shall therefore beg you to send me two more; one of which I intend to give away to a man in the neighbourhood, to whom I am clear it must be of service, from the similarity of our stomach complaints. Dear Sir,

Your obliged friend and servant,

J—— L——

*To Mr Mather.*

## IV.

*An account of the Effects of Compression by the Tourniquet, in stopping the Cold Fit of Intermittents. Communicated to Mr George Kellie, Surgeon, Leith, in a letter from his son, Mr George Kellie, Surgeon on board his Majesty's Ship the Iris.*

May 21. 1794.

**A** GREENABLE to a promise which I made you in my last letter, I propose taking advantage of the Leith tender, now here, to forward to you some observations I have made on the effects of tourniquets, in stopping the cold fit of intermittents, and thereby shortening and rendering more mild the whole paroxysm.

I received the first hint on this subject, when in Holland last year, from the pilot we had on board the Expedition. We were, in the month of March, lying off Williamstadt,

liamstadt, at that time besieged by the French, when several of our people were seized with agues, which however were mild, and easily subdued by bark and a morning glass of gin, which the Dutch themselves take very liberally, and perhaps safely, as a preservative from the baneful miasmata of their country. In speaking of these complaints, our pilot told me, that he had once suffered very severely from a quartan with which he was afflicted for many months. The cold fit, he said, was particularly severe, and he always suffered more from it than from the other periods of paroxysm; and that an old woman had at length furnished him with a most effectual means of putting an entire stop to it, and that, too, without the assistance of any medicine whatever. The secret was simply to tie one *garter* round the *right arm*, and another round the *left thigh*, tight enough to obstruct the circulation below. And this he had done very frequently with never failing success. I was disposed to doubt the account, or, at least, to suppose some mistake or fallacy in it. A few days after, however,



I had an opportunity of making some experiments, which proved beyond doubt that the account was true.

*John Humphries*, one of the seamen, was seized with a very regular tertian ague, in which the cold fit and shaking was pretty severe, and I was induced to make trial of this strange remedy upon him. I therefore desired I might be called, the moment he perceived the approach of the next paroxysm. On the 20th March, about 10 in the morning, perceiving the cold fit coming on, I was accordingly called, and found the usual symptoms of the first stage of an ague completely formed; he was shaking very violently, and complained of very severe pain across the loins. I had prepared myself with two tourniquets, and now applied one to the right arm, and the other to his opposite thigh, at the place where it is commonly applied in amputations above the knee. I thus stopped the circulation of these extremities below the tourniquets, and found to my surprise and pleasure, that in two minutes thereafter, the shaking, and o-

ther symptoms of the cold stage, entirely ceased ; a mild hot stage was immediately induced, and the man found himself quite relieved, for the severe pain across the loins had also vanished.

I kept the tourniquets on fifteen minutes, and then removed them entirely. The cold symptoms did not return.

About 11 in the morning of the 22d instant, he was again attacked. When I saw him, he was shaking very violently, and complained of headach, and pain of the loins. Before screwing the tourniquets, I counted his pulse ; it was small and hard, beating just 100 times in 60 seconds. I now, as before, stopped the circulation in both extremities. I kept a watch with a stop and second before me, and found that, in three minutes, from the obstruction of the circulation in the extremities, the cold stage entirely ceased, the headach was easier, and pain of the loins entirely gone. I kept the tourniquets on ten minutes, and now counted the pulse, which I found soft and full, beating 120 in one minute. He was thirsty ; but had no other complaint. Every symp-  
tom

tom of the hot stage was uncommonly mild; and the whole paroxysm very short.

On the morning of the 24th, I placed the tourniquets as formerly, on the extremities, some time before he expected the paroxysm, and directed them to be screwed the instant he perceived the approach of his ague. About half past 10, he perceived the symptoms which precede the shaking, viz. lassitude, and the pain of his back; and therefore, agreeable to my directions, screwed the tourniquets. The cold stage was entirely prevented. The tourniquets were kept on five minutes only. When they were removed, his pulse beat 112 in a minute. He was hot and thirsty, and complained of slight headach. These symptoms of pyrexia continued three hours, and terminated by a copious perspiration.

In all the intermissions, he had regularly taken the peruvian bark; and this was the last paroxysm with which he was seized.

From this time, till the month of July following, I had no opportunity of making farther trials of this kind. When lying in Carrick roads, Falmouth, in his Majesty's

S 2

frigate



frigate the *Sphynx*, *John Grey*, one of the quartermasters, was seized with aguish symptoms. Early in the morning of the 21st July, he was attacked with shiverings, and cold shaking, succeeded by heat, headach, and pain of the stomach. I saw him about 10 in the morning, and ordered him an emetic. It operated well. In the evening, he perspired freely, and was afterwards quite easy. Next day, he complained of headach, and his pulse was somewhat full, and accelerated. He was ordered an ounce of a common antimonial julep every hour, which I generally keep prepared as an universal antidote for those slight febrile complaints so frequent amongst seamen, from obstructed perspiration. In the evening, he was relieved by sweating.

On the 23d instant, he had a very regular paroxysm of the ague, beginning with lassitude and shaking, succeeded by heat, thirst, headach, and fever, and abating with a copious perspiration.

Next day, he was well; and from 8 in the morning, till 3 in the afternoon, took every hour half a drachm of bark.

Expecting

Expecting he would be seized on the 25th instant in the same manner as on the 23d, I desired I might be acquainted the moment he perceived the cold and shaking come on.

He was accordingly attacked about 11 in the morning; and when I was called, I found him agitated by very severe succussions. I immediately applied the tourniquets, one to the arm, the other to the opposite thigh. In three minutes from their application, the shaking, and other symptoms of the cold stage of ague, entirely ceased; the hot fit came on, and run its usual course. The day following he was well, and took the Peruvian bark.

On the 27th, although I expected a paroxysm, I was under the necessity of being ashore, and therefore desired Mr Macqueen, the surgeon's mate, if Grey should be seized, to apply the tourniquets as I had done, and note the result. About 11, he was attacked with the cold fit. The tourniquets were applied as directed; and, as usual, put an end to that stage of the disorder in two minutes.

For three days after this, he continued to take the bark, and never had another fit. As cases of intermittents seldom occur in ship practice in those seas, and wishing to have as many trials of the tourniquets as I could collect, I have begged the favour of several practitioners to try them; but from the wandering unsettled nature of my situation, I have never been long enough in one place to know the results. On our arrival, however, in this harbour, I found there were some cases of ague on board his Majesty's hospital ship, the Union; I therefore begged the favour of Mr Veitch, surgeon's first mate of the hospital, to repeat the trials I had already made. He was so obliging as to do so repeatedly, in several cases, with considerable care; and informed me, "that in every case in which he applied the tourniquets as I directed, the cold stage was put a stop to, within three minutes after their application. And that although the hot stage was never entirely prevented, yet he always observed, that the whole paroxysm was much shorter in duration, and every symptom of the hot stage milder."

Upon



Upon the whole, therefore, from the few trials I have had an opportunity of making, it appears confirmed,

1<sup>st</sup>, That at any time *during* the *cold fit* of an intermittent, if the tourniquets be so applied as to obstruct the circulation in two of the extremities, in three minutes thereafter the hot stage will be induced.

2<sup>dly</sup>, That if the tourniquets be applied *previous* to the accession of the paroxysm, the cold stage will be entirely prevented.

3<sup>dly</sup>, That where the cold stage of an ague is either thus shortened, or altogether prevented, the following hot stage is rendered both milder and shorter in its duration.

How far these results of a few experiments may be found applicable to the practice of medicine in these disorders, time and future observations must and can only determine. This much, however, is certain, that the indications for which they are used, are already laid down by our best physicians; for, to put a stop to the paroxysm in its beginning, has long been esteemed a great object; and with this view,

spirituous liquors, hot tinctures, and spices, opiates and emetics, are frequently, though not always successfully, employed.

It is probable, that the tourniquets act in the same way as these, though more certainly, viz. by increasing the powers of the sanguiferous system, during the state of atony of the extreme vessels.

Dr Cullen, you know, supposes, that in every paroxysm of fever, there exists an atony and spasm in the extreme vessels of the system, and that the hot stage itself is the effort of the *vis medicatrix naturæ* to overcome the spasm, and restore the tone of these vessels. Now, an increase of the velocity and momentum of the blood in the circulatory system, is the certain and invariable effect of obstructing the circulation in any part of it, as I have found from repeatedly applying the tourniquets on my own person, in like manner as I had employed them on those affected with ague. I have thus determined their effects on the healthy body, and find that they occasion,

1<sup>st</sup>, Great increase in the velocity of the circulation, as judged from the pulsation of the heart and arteries.

2d, Increase of heat, and flushing of the face.

3d, Anxiety, and more frequent respiration.

4th, The tourniquets being kept on more than six minutes, induce a tendency to syncope.

5th, The tourniquets being removed, and the circulation restored, the velocity of the circulation soon falls to its natural standard, and frequently considerably below that.

I shall give you, as an example, an experiment which I made only last night, when going to bed.

PULSE



PULSE.	
70—Small, & rather hard.	Before the application of the tourniquet.
90—Full, & rebounding.	The circulation being obstructed in two extremities for four minutes—heat and anxiety—I removed the tourniquets.
84— Full & soft.	The tourniquets being removed.
68, and soft.	15 minutes after the tourniquets were removed.
60, and soft.	25 minutes after the tourniquets had been removed.
60, and soft.	An hour after the tourniquets had been removed.
60—Small, hard.	Next morning before breakfast.
68.	Two hours after breakfast.

From this experiment you see, that in five minutes from the obstruction of the circulation, my pulse had increased in velocity by twenty beats in a minute; and that an hour after their removal, my pulse fell ten below what it was previous to their application.

The

The *tourniquet*, therefore, may be classed along with those remedies which operate by increasing the momentum and velocity of the circulating fluids, and therefore assisting the efforts of nature in putting an end to the paroxysm. And of all remedies of this kind, I am convinced it will be found the most powerful.

If any opportunities should occur in your practice, I wish you to give them a trial, and communicate to me the result. In the meantime, I commit the above observations entirely to your hands, giving you every power over them which you may think proper to use.

## V.

*Observations on the Kuritssha Slepota, or Her  
Blindness of Russia. Communicated to Dr  
Duncan, in a letter from Dr Mathew Gu-  
thrie, Physician at St Petersburg.*

PERMIT me to renew our ancient cor-  
respondence, by a few observations on  
a curious disease of this country, which I  
never remember to have seen treated by any  
British physician, and which, of course, pro-  
mises novelty to the public, although I per-  
ceive that its name at least was not un-  
known to the indefatigable nosologist Sau-  
vage, whom nothing seems to have escaped,  
and from whom Dr Cullen seems to have  
taken his first species of Dyfopia, which is  
pretty nearly the disease in question.

This singular complaint has been long  
known in the interior parts of Russia to the  
peasants, who are subject to it, and who have  
given it the name of *Kuritssha Slepota*, or the

*Her*



*Hen Blindness*, as the patient loses the use of his eyes at the *setting*, and recovers it again only on the *rising* of the sun ; even in Summer, when we have in fact no night ; like the domestic hen, according to the popular opinion of the country, which has given origin to the fanciful name of the disease.

I must own, that, although settled for so many years in this empire, and by no means inattentive, as you know, to any thing worthy investigation, it is but a very short time since I heard of this curious complaint, on the following remarkable occasion.

I was lately desired to give an opinion on a curious phenomenon that happened last war in Finland, where a Russian detachment, ordered to attack a Swedish post during a light night in Spring, had like to have mistaken one another for enemies, and occasioned bloodshed, owing to some hundreds in the column being *blind after sun-set*.

This singular fact (which has been since confirmed to me by several officers who served in the very regiment where the disease obtained), set me upon immediate inquiry into the nature and frequency of the complaint ;

complaint ; and I found, that the *peasants*, to whom I already owe so much information, (as you may see in the *Bee*), were the only people in this country, from whom I could obtain a distinct account of its cause and cure ; both of which I shall now give you.

The *Kuritssha Slepota*, or Hen Blindness of the Russians, seems to be the *Dysopia Tenebrarum* of Cullen, and the *Amblyopia Crepuscularis* of Sauvage ; whose specific or trivial name seems to refer directly to the very variety of the disease I am treating of.

The result of all my village information was,—

1<sup>st</sup>, That the disease is pretty common amongst the Russian peasants, who have given it the name mentioned above.

2<sup>dly</sup>, That they are generally seized with it after much fatigue and watching, more particularly during the hay harvest, when they commonly work all night, to avoid the sultry heat of day, and sleep less than usual.

3<sup>dly</sup>, That it is attended with no pain, or disagreeable sensation in the part affected, although the patient loses completely his sight after *sun-set*, even in the lightest night  
of

of Summer, and does not recover it till its rising again ; whilst it is impossible, on the strictest examination of the eye, to distinguish those who have, from those who have not the complaint.

4<sup>thly</sup>, That its duration is only temporary, seldom lasting above a month or six weeks, even when the disease is left to itself ; but that they know and use a village specific, which removes it in a week or fourteen days at most.

This specific, unfortunately, the Winter season prevented me procuring a sample of, as it is a *plant*. However, by all the descriptions I have got of it from the peasants, it must be the *Centaurea Cyanus* of Linnaeus, the Corn Flower, or Blue Bottle of Britain. Indeed, its Russian village name of *Cinets*, or Blue Flower, almost puts my conjecture out of question ; although I shall have the fresh plant brought me next Summer for greater certainty.

The peasant drinks a decoction or infusion of the *Cinets*, in the form of tea, but without sugar, or rather honey (for that is the Russian village sugar), which the boors are  
feldom



feldom without, if it would add to the virtue of the remedy, but which they find, on the contrary, retards the cure, effected by the *bitter* infusion in a week or fourteen days.

Now, Sir, I think from all these facts, I may venture to hazard the following observations on this curious disease.—

That it appears, the Russian *Kuritssha Slepota* is commonly preceded by much bodily fatigue, and extraordinary vigil, at a season when the eye is exposed with little intermission to the constant action of light, as the sun dips during the hay harvest (in the end of June and July) but a very little below the horizon, and that for a very short time. So that we may at least suspect, that the disease takes its origin from *long continued action of light on the eye*, possibly producing some weakness in it, as it is cured by the use of a bitter tonic infusion, even although the patient continues his daily hard labour, providing he sleeps, as at other seasons, during night.

The event at the army strengthens this conjecture, as the complaint seized the soldiers in the Spring, when the nights, from the

the short absence of the sun, and the strong reflexion from the snow, must have been very fatiguing to the eyes, at a period of much martial vigil and alarm; surprises on both sides being then very frequent, more especially nocturnal.

But still the disease seems always connected with bodily fatigue and inanition, as the regiment where it obtained in so remarkable a manner, had marched all the way from the Taunide, or Crim Tartary, to make head against the Swedes in Finland.

As it may possibly furnish matter of speculation to some of your numerous writers on scurvy, I shall add, that this regiment, although mostly composed of recruits, resisted our *land scurvy*; which, as I asserted in a paper in the Medical Commentaries of Edinburgh some years ago, often rages amongst our troops who have not been to sea whilst fresh and prepared vegetables are scarce, and till the fine season with its productions puts a stop to its fury. I say, that the same raw regiment, which had made so long and fatiguing a march, was the last in the whole army who felt the septic influence of a



northern Winter, and suffered the least by it, as I learned from an able countryman (Dr Galloway), one of the physicians to the army in Finland, to whom I read this letter ; and I was sorry to learn, that the soldiers who were seized with the disease I am treating were not brought to the military hospital he had the charge of, or we should certainly have received a better account of it than I have been able to draw up from the unlettered peasants.

I cannot close my letter without mentioning, that during my inquiries after the *Kuritssha Slepota*, I met with some very unexpected information on a disease which is its diametric opposite, viz. the *Dysopia Luminis* of Cullen, the *Amblyopia Meridiana* of Sauvage, whose specific name seems again to refer directly to the very variety of the complaint mentioned in the following anecdote.

A gentleman belonging to one of the two military corps of Noble Cadets, to which I am physician, assured me, when talking of the nocturnal blindness of Russia, that he had once seen a most curious example of a disease diametrically opposite to it amongst troops



troops in France, who were blind in sunshine.

Whilst in garrison in Landau, in Alsace, in the Summer of the year 1772, two hundred men of the regiment of *Picardie*, were seized with a species of blindness during the meridian splendour of the sun, and could not see their way when it was not overcast, inso-much, that when they had strolled out in the fields during a cloudy day, if the sun suddenly shone out, they were absolutely obliged to be led by their companions, till a cloud once more obscured the glorious luminary, and enabled them to pursue their undirected course.

I shall be happy if this letter should draw the attention of the Faculty, more particularly that of the army practitioners, to the observation and investigation of these curious diseases, as in that case the public may expect to see the subject amply discussed, and much information added to the little here collected.

## VI.

*Account of the Arabian Mode of Curing Fractured Limbs. Communicated to Dr Guthrie of Petersburgh, by Mr Eaton, formerly Consul at Bassora.*

HAVING often seen much mischief occasioned by tight bandages, I am astonished the able surgeons of Europe have never discovered a better method of reducing fractured limbs than that at present in use; more especially as I observed amongst the Arabs one infinitely superior (in my opinion) in every point of view, and accompanied with every possible advantage and convenience, whether to the patient or surgeon.

However, to enable others to judge of it, I shall here relate a *case*, where I attended the reduction of the fracture, and saw the cure completed, although of that desperate kind which would scarce have been attempted in Europe without amputation.

An



An Arab, one of my soldiers at Bundernck, on the Gulph of Persia, having had his leg and foot fractured, and almost crushed to pieces, by the falling of a field-piece from its carriage upon him, which forced the ends of the bones through the skin, our European surgeon proposed immediate amputation above the knee as the only means of saving his life, and prognosticated the death of the patient, from his obstinacy in refusing to submit to the operation. The Orientals in general, particularly the inhabitants of those parts, will never consent to have a limb cut off; so that the people of the country undertook his cure in their own way, which succeeded beyond expectation, and which it is the intention of this letter to describe.

#### ARABIAN MODE OF TREATMENT.

After having transported the wounded soldier into an *aiwan* (or open recess, arched above), and placed him on the floor, his leg lying on an *oiled mat*, they reduced the bones and shattered parts into as good a form as they could, to be inclosed in a case of gypsum or Paris plaster; an operation



they perform much in the same way as is practised by statuaries to take a cast of a limb, with some little variation to serve particular purposes in the cure, which is to be effected in a light case of this matter, to keep the parts in a proper position, and defend the wounds from insects, air, and external injury.

To accomplish this purpose, then, they first poured the Paris plaster under his leg, till it rose to such a height as to touch its whole lower surface and part of the thigh, filling up all inequalities, so as to form a sort of bed for the wounded leg to repose equally upon in all its parts; placing at the same time a few pieces of hollow reed at proper distances, and in such position, as to serve to conduct away through the plaster any *fluid* that might collect in the gypsum case, from the wounds, &c.

When this plaster cushion was become firm, which it does in a very short time, the whole leg was next covered with the same Paris plaster, so as to inclose it completely, and, on hardening, to form a light case or plaster boot, to keep the parts in as natural

a position as the shattered state of the leg would admit of, leaving small openings opposite to the projecting pieces of bone, to admit of their exfoliation.

They next made a sort of furrow or channel in the soft plaster, on the upper surface, the whole length of the shin bone, and directly over it, to receive such vulnerary fluids, during the treatment, as they think conducive to the cure, and which filter through the plaster or gypsum, to humect the leg at pleasure.

*Lastly,* To render this upper shell or covering more easily removed and changed during the cure, if necessary, to examine the state of the parts, &c. they make deep incisions into the soft plaster, both lengthways and across, though not quite through to the leg; by means of which, the upper case is removed without disarranging the limb, whilst the cushion or plaster bed on which the leg reposes, is seldom either changed or touched during the whole process, although the *oiled mat under all* prevents the adhesion of the gypsum to the floor, and makes transporting the whole



boot or plaster case practicable, should such a measure at any time be found expedient.

By this simple and curious Arabian practice, the soldier was perfectly cured. As to the duration of the treatment, the accident happened in May, and on the Colonel's return from a second expedition in September, he found the patient walking about, and enjoying the use of his leg, in spite of considerable deformity, the natural result of so terrible and complicated a fracture, where both the bones of the leg and foot were broken and splintered in a very uncommon manner, with several sharp pieces of them projecting through the muscles and skin.

The fluid employed was an ardent spirit drawn from dates, a species of arrac made in that country, poured into the trough or furrow over the shin bone from time to time, so as to filter through, and keep the leg always moist, till the wounds were cured.

The writer thinks, that an improvement on the Arabian plaster-of-Paris case would be, to make it with a moveable cover, or upper case, joined at pleasure to the lower, by means of holes in the edges of both, in  
the



the manner casts are taken; which would enable the operator to examine the state of the parts when he pleased, without breaking to pieces the cover every time he removed it, as is the practice of the Arabians, although they seldom touch the limb, till it be cured, except to pour on the spirit of dates.

I must remark, upon the curious communication of my ingenious friend, that the Arabians seem not to be unacquainted with the excellent effects of ardent spirits on wounds, a discovery the Europeans thought they possessed exclusively, and have long been drawing great profits from, under the name of *Arquebusade Water*, *l'Eau de Colonne*, *Baumé de Riga*, &c.; which are all nothing but spirit of wine disguised by some additional ingredient, which contributes nothing to its virtues, as I have found by using the spirit of wine with great success for many years past, without any admixture, in all cases of fresh wounds; and which generally cures without suppuration, where there is no considerable loss of substance.

## VII.

*History of a Case with many Anomalous Symptoms, apparently arising from Bile, successfully treated with Mercury. By Dr Oliver Martyn, Physician, Galway.*

**M**ISS E—, aged 19, of a delicate and irritable constitution, suffered much from grief about twelve months ago, for the loss of a mother, by whom she was tenderly beloved.

*December the 8th, 1792.*

Has had a severe cough since July last, with difficult expectoration. What little she spits, is, at times, tinged with blood. Pain in both her sides. Soreness of her chest. Coughs incessantly; and is a good deal oppressed. Pulse rather full. Appetite indifferent for some time past. Belly natural; but, in general, rather costive. Menfes regular. To have six ounces of blood taken from



from her arm. Was bled: but, no more than two ounces could be obtained, having become weak. Ordered to bed; to inhale some warm vapour; to have a blister applied between her shoulders this evening, and a table spoonful of saline mixture every second hour; as also, some pectoral syrup: a tea-spoonful to be taken occasionally.

9th. Blister rose well. Breathing and foreness of the chest much easier. Had some hysteric paroxysms during the night, succeeded by vomiting. Expectorates more freely. To continue her medicines; and have an anodyne draught going to rest.

10th. Rested badly. Had frequent hysteric paroxysms during the night, with weakness. To have a solution of assafoetida, with spirit of nitre and laudanum: a table-spoonful to be taken occasionally. And her opiate going to rest.

11th. Passed an indifferent night. Paroxysms continue. Complains of great pain in the small of her back. Has made very little water, and that very muddy and high coloured. To have a turpentine injection with



with assafoetida and laudanum, and some opening pills.

12th. Has taken four of the pills, which had the desired effect. Paroxysms continue. Complains much of pain in her sides, particularly the right; and says her stomach is drawn quite to her back. Pain in her loins very troublesome. To have a blister applied to her side; the injection repeated; her back well rubbed with a camphorated liniment; and an anodyne pill when going to rest.

13th. Blister rose well. Passed an uneasy night. Paroxysms continue. To have a musk mixture, with some sal volatile, cornu cervi, and laudanum; and an anodyne pill, with two grains of opium to be taken at night.

14th. Passed an easier night. Paroxysms much milder. Slept about an hour and half. Stomach much better.

15th, and 16th. Continues better.

17th. Had a tolerable night. Put on her clothes this morning; and was prevailed on to go into the drawing-room. Remained up till about 9 in the evening, when she was  
taking

taking a very small quantity of minced mutton ; immediately after which, she was seized with a hiccup, which continued with very little intermission during the night.

18th. Hiccup still continues ; and frequently terminates in a hysteric paroxysm, succeeded by vomiting and weakness. As soon as she recovers, the hiccup returns with more severity. To have her stomach fomented, and, immediately after, a blister applied to it ; her anodyne pill going to rest ; and a mixture of æther and laudanum : a tea-spoonful to be taken occasionally.

19th. Catamenia appeared in the course of the night. Blister rose well. No rest. Hiccup continues, with increased violence. The muscles of her breast, throat, and arms, begin to be severely affected at times. To have her feet bathed, and an injection, with an infusion of valerian, laudanum, and assafoetida. As also, a bolus, with musk, opium, and Sal vol. Corn. Cervi.

20th. Catamenia continued, and rather increased in quantity. Hiccup, with spasms, continues ; which terminates in a general convulsion of the entire body. Vomited a  
good



good deal in the course of the night and this morning: and says her sides are drawn together to her stomach, like a purse. The sudden jerks of the hiccup, give her great pain. Muscles of her face prodigiously affected during the paroxysms. Has taken eight grains of opium in the course of the night. Had the spine well rubbed, with equal parts of oil of origanum and amber, without any good effect. Gave her some spoonfuls of lemon juice; as also, some teaspoonfuls of vinegar, occasionally, every hour this morning, without relief.

Three in the afternoon. Paroxysms and sickness at stomach continue with equal severity. Gave her a vomit; and had it worked off with an infusion of columbo root. After the operation, she fell fast asleep; and slept five or six hours: but awoke with the hiccup and spasms, which terminated in a kind of general tetanus. To have an absorbent mixture with some decoct. Corn. Cervi, for her ordinary drink. Broth and wine whey, as usual.

21<sup>st</sup>. Passed a very restless night; and complains much of being exhausted. Had



no stool these two days. To have some opening pills with calomel.

*Nine in the evening.* Took six of the pills without any effect. To have a common domestic injection.

22d. Retained the first injection ; but got a second, which had the desired effect. Had a good many copious stools early this morning : the first of which, the nurse says, was of a black colour, and had a fetid smell ; but the latter, laxative, and of a yellow colour. Hiccup, paroxysms, &c. as severe as usual. Catamenia on the decline.

Having received scarcely any benefit from any thing she had hitherto taken, I requested a consultation. Accordingly, my worthy and much esteemed friend, Dr Joyce, (a physician of experience, and long eminent in the line of his profession), was sent for. On his arrival, I gave him a narrative of her situation. He happened to see her in one of the paroxysms, which distressed him very much, being naturally of a very humane and tender disposition. However, though he conceived her situation to be very alarming, having obtained no relief from the variety

riety of medicines she had taken, he still had hopes that the application of an antihysterical plaster to her stomach, and a tea-spoonful of nervous drops to be taken occasionally, might afford some relief.

*Six in the evening.* Has taken none of the drops; nor could she bear the plaster to her stomach, which was now become sore and swelled. Hiccup, with convulsions, &c. as usual. Her situation becoming more and more alarming, I remained with her till six in the morning. In the course of the night, gave her different doses of musk, combined with castor and camphire. The quantity she took this night of the musk, amounted to 120 grains; as also, some valerian in powder, a drachm for a dose, all without obtaining the smallest relief.

23d. Paroxysms much more severe. Her speech begins to be affected, and complains that she can hardly see at times. Dr Joyce having retired from business, and living a small distance from town, being a delicate man, was prevented, by the inclemency of the weather, from visiting my patient this day;



day ; which induced me to write, and give him a particular account of every circumstance that occurred since he had seen her, the day before. In my letter, I mentioned my idea of rubbing in a small quantity of mercurial ointment, being the only medicine I thought worthy of notice, left untried. This I suggested merely from analogy, from the various accounts we have of its good effects in tetanus and other convulsive affections, in America, West Indies, &c., though I never met with any account, where it had been employed in singultus, or in any case similar to the present. He wrote me for answer, that her case was truly alarming ; that he was not acquainted with the good effects of mercury in such cases ; and, at his period of life, was too timid to try experiments : but imagined, that another blister, applied as near the part affected as possible, might afford some relief. To this I readily acquiesced, being particularly interested, and anxious to have nothing left undone.

*Six in the evening.* Had her put into a warm bath, wherein she remained half an hour. When about fifteen minutes in the



bath, the hiccup ceased ; and she seemed perfectly at ease the remainder of the time. Immediately on putting her to bed, she became affected with weakness, which continued near an hour ; but, on recovering, the hiccup and convulsions recurred with as much violence as ever. A blister was immediately applied to her right side, where she had one a few days ago, being now perfectly healed. Being deprived of Dr Joyce's assistance, from his delicacy and distance from town, I requested another physician might be sent for, when my friend Dr Blake was called on. Receiving a detail of her melancholy situation, and viewing her in one of the paroxysms, he lamented that so much had been done without any apparent relief. I mentioned to him my idea of introducing a small quantity of mercury into the system ; but, having no experience of its good effects in such cases, and the paroxysms being so violent, he was more desirous of waiting the effects of the blister, and trying opium in a still larger quantity than had been hitherto given. I readily agreed ; and we accordingly ordered twenty grains of opium to be made into

ten.

ten pills, one to be taken every second hour. The paroxysms became so very severe, that I doubled the pills; that is, gave her four grains every second or third hour: so that she had the entire twenty grains taken by seven in the morning. I gave her three of the pills, and the apothecary's young man, who sat up, gave her the remainder; so that we were perfectly certain of her having taken the entire quantity; nor did she vomit any thing in the course of the night.

24<sup>th</sup>. Has not been at all quieted by the pills, but rather more restless, and very much agitated. Convulsions continue almost without intermission. Tongue palsied, so that a person could hardly understand her when speaking. Pupil of her eyes totally inverted. Stomach so swelled and sore, that she could scarcely bear the weight of a sheet over it: and nothing was now to be expected but a fatal termination, either from an approaching gangrene, or the thread of life being cut short by the ensuing paroxysm. Inflammation of the stomach being now so much increased, we were very doubtful of the effects of mercury, lest, from its stimulant quali-

ty, it should increase the activity of that inflammation we wished to subdue, and thus hurry on the fatal catastrophe. However, my friend Dr Blake concurred; and I was determined to leave nothing untried, though with very little hope of success.

I, accordingly, had three drachms of strong mercurial ointment well rubbed into her left side; and her stomach fomented with unremitting assiduity the entire day. The rubbing was completed about half past twelve o'clock; and she imagined it gave her some ease.

*Three in the afternoon.* Had a very severe fit, which they all imagined would terminate her existence. This paroxysm lasted near an hour. Shortly after this, she fell into a profound sleep; got a slight perspiration; slept till eleven, and awoke much refreshed. Nor had she any return of the hiccup or convulsions. This was the first regular interval she had obtained for many days.

*Eleven at night.* Had her side rubbed again with a drachm of the ointment, and her stomach fomented as usual.

25th.



25th. Passed an easy night. Stomach much better. No return of the hiccup or convulsions, since four o'clock yesterday. Is in good spirits this morning. To have an anodyne pill going to rest.

26th. Had rather an uneasy night. No sleep. Complains more of the forenefs of her stomach this morning. Is altogether not so well as yesterday; but has had no return of the hiccup, or other spasmodic affections.

*Ten o'clock at night.* Continues rather uneasy. Had a loose stool about half an hour ago. We determined to leave her this night without any medicine. About eleven, was seized with a severe bilious purging and vomiting. I was called on about one in the morning, when I found her very much distressed. Great anxiety. Countenance very pale. Vomiting, and pain in her stomach and bowels very violent. Gave her an infusion of columbo root, of which she drank very plentifully; and remained with her till four in the morning, when she seemed rather easier.

*Eleven in the morning.* Vomiting and purging still continue; and in my life I never saw such a quantity of bilious stuff thrown up by any one person. It was kept in different basons; and was so viscid and ropy, that it might be almost trailed along. The bottom part was of a dark yellow colour, and the surface of the brightest green. About twelve, gave her two grains of opium, which had the desired effect, having neither purging nor vomiting afterwards.

*28th, 29th, and 30th.* Continues well. No return of her complaints. Is very feeble. Appetite impaired. Rests badly. To have a stomachic mixture; a quieting pill going to rest; and some opening pills to be taken occasionally.

*January 10th, 1793.* Has had some hysterical weaknesses off and on, for some days past. Continues feeble; but has no return of her other complaints.

*21st.* Has been complaining alternately, every other day, of a kind of involuntary tremulous motion of the entire body, with hysterical weakness, loss of appetite, &c. In the intermediate days, she seems tolerably

ably well. To continue her stomachic mixture, with bark, &c. Ordered to the country, to partake of air and exercise; and, at the opening of the season, to go to some chalybeate watering-place.

I have only to observe, that the above directions were complied with. She continued ill for a length of time; she went to England the beginning of Summer, and returned in Autumn to this country, perfectly restored to her health. But, as she lives in a distant part of the country, I have neither seen nor heard from her since: but, shortly, expect to have a particular account of every occurrence that has happened since her departure.

I shall avoid making any comment on this case, or on the variety of anomalous symptoms which occurred in it. That the severity of the complaint, and violence of the symptoms, had been occasioned by the vast quantity of bilious matter at last discharged, will, I believe, appear pretty evident. Whether the mercury acted as an attenuant of bile, or resolvent of some obstructions in the



biliary ducts, whether from calculi, or any other matter, or as an antispasmodic, or as both, I shall leave gentlemen to determine for themselves. But, I presume, the good effects of mercury will appear undeniable, when most other medicines, after having got the fairest trial, had failed.

## VIII.

*Account of the pernicious Effects from an Impregnation given to Water by Lead. Communicated to Dr Duncan, by A. B. in the Service of the Hon. East-India Company.*

AS an account of the following unfortunate circumstance, may perhaps in some future period hinder a similar accident from taking place, I consider it to be my duty, as a member of society, to point out an unquestionable instance of the pernicious custom of using any kind of drink which has for a certain time been in contact with lead. I myself, and several others, have very nearly lost our lives from this cause; and perhaps the singularity of the accident may render an account of it not unworthy a place in your valuable collection. Of this, however, you will be able to judge, from perusing the following narrative.

About ten months ago, a small packet set sail for India, and for some time had a very  
prosperous

prosperous passage ; but afterwards, in consequence of contrary winds, all hands were obliged to be put upon an allowance of three pints of water *per* day. The seamen kept each their allowance separately in bottles ; while the officers, on the other hand, were so unfortunate as to put all their's into a leaden cistern, with a stop-cock, which, as in many other vessels of the same kind, is situated for this very purpose at the door of the cabin. The consequence of this was dreadful indeed. In about three weeks time, there was not one of the officers who was not affected with all the symptoms of the Colica Pictonum in the most violent degree. The colic, regularly, morning and evening, became remarkably aggravated ; the pain all over the abdomen was intense ; and, along with the usual spasmodic affections in this disease, we had sometimes a *tendency* to universal convulsions. For nearly the space of six weeks, almost nothing would remain even for a moment on our stomachs, so that some of us were obliged to have nourishing glysters occasionally. After being about five weeks in this condition,



tion, we arrived at St Helena, where we all gradually recovered in the course of a few weeks ; though some of us have had very severe relapses of our complaint during our return to England. For some time past, too, we have been subject to weakness of the back and superior extremities, which has now, however, totally disappeared.

The above symptoms proceeded at several times to such an alarming pitch, and at last reduced us so much, that, even upon making land, two of us with the utmost difficulty escaped with our lives.

Upon considering the matter for a moment, there cannot, I apprehend, be the smallest doubt with respect to the cause of the above symptoms. That they were occasioned by the leaden cistern we have mentioned, is proved not only from this circumstance, that every one of the officers who lived upon the water contained in it was affected, while not one of the seamen (who all, as we have said, kept their allowance separately) had the smallest complaint ; but also from the following experiment which I made, to put the matter beyond a doubt.

Having

Having filled two tumblers, one with pure water, and the other with water from the cistern, I poured into each of them a small portion of a solution of hepar sulphuris ; the consequence of which was, that the latter was rendered very dark-coloured, while the appearance of the other was hardly changed.

How the water could become so impregnated with lead, I shall not absolutely pretend to determine. Perhaps the small quantity of water might, in consequence of the motion of the vessel, mechanically separate a small portion of the metal : Or, not improbably, as it had been kept for several weeks, it might take some portion of it up by means of a chemical affinity. But in whatever manner the above event might happen, our unlucky case too clearly proved *that a portion of lead was contained in our allowance of water.*

I shall conclude what I have to say upon this subject, with a few words upon the method of treatment in the above complaint.

During the whole course of it, purgatives, injections, and the semicupium, were almost the only remedies we could depend upon.

Opium,

Opium, whether administered by the mouth or anus, ought never to be exhibited previous to some purgative medicine; for in the course of our complaint, I had an opportunity both of *feeling* and *observing* that, by following a contrary practice, the pain and tension of the abdomen, the gripes, costiveness, and in short all the symptoms, were uniformly aggravated. It will, however, in some instances be necessary, after the operation of the purgative, nay sometimes even before it has begun to operate, to give a moderate dose of opium by the mouth or anus, according to circumstances. Opium, however, is a remedy which, I can freely say from experience, ought to be used in this complaint as sparingly as possible, and with the utmost precaution; for although it may often remove, and even prevent the spasms of the intestines for the time, yet I have uniformly found, that it renders them much more liable to return, than if no such remedy had been employed. What I found to be of the greatest service in my case, was an electuary, in which camphor and flowers of sulphur were the principal ingredients; this remedy proving both an antispasmodic and



a laxative. Bleeding, too, was a remedy, which, though unwillingly, I was under the necessity of employing, in consequence of the repeated supervention of severe inflammatory symptoms.

As I know from undoubted authority, that there are many vessels which have leaden cisterns of the same kind with that which occasioned the above unfortunate accident; and as perhaps at some future period a case similar to ours may not improbably again take place; it may be worth while to publish the foregoing account, by which at least the *surgeons* of such vessels may be put upon their guard, and similar catastrophes, if possible, prevented. Nay, it may even be attended with beneficial effects on shore; for as I am well informed that there are leaden cisterns, and even leaden utensils, in use among many families in this kingdom, unfortunate accidents cannot fail of sometimes happening. And I think that it is incumbent upon every medical person to do what he can in advising the abolition of every leaden machine, with which the articles of our diet may possibly come in contact.

## IX.

*Account of a singular Case in Midwifery. By  
Mr William Rait, Surgeon in Dundee.*

ON Wednesday 10th July 1793, an uncommonly hot day, I was called to Susan Reid, in Drumsturdy Moor, a woman of a small size, but who had been all along remarkably healthy till 28th May. Being then pregnant, she met with an accident of a very alarming nature, no less than the rude and brutal attempt of a neighbour man, in the absence of her husband. I have a curious letter by me, narrating the facts and circumstances; but delicacy prevents the publication of it. It states, however, that “he began with some unreverend language; and immediately pulled the woman out of the washing-skeel (tub), with her back over his knees; and she found something give a crack within her.” After a variety of curious conjectures concerning that circumstance,

stance, my informant adds, “ but the woman never found life since that time.”

On Saturday 6th July, she walked about three miles from her own house, and on the journey labour pains came on, and the waters were evacuated. She lingered on without any other assistance than that of an old ignorant country midwife, till the time I was called.

I found her indeed in a very deplorable situation. She was on her knees, in a mud damp floor, with a putrid left arm and umbilical cord hanging in part without the os externum; the hand and fore arm nearly stripped by the exertions or handlings of the midwife.

I immediately ordered her to be placed in bed, in a proper position for attempting the delivery. Her strength was apparently gone, and she had not a single natural labour-pain during the whole time I attended her. It was very natural to suppose the uterus in a rigid and contracted state from the time the membranes had given way, and also from the sultry state of the weather, so favourable for promoting absorption: and I certainly found  
it



it so ; for it was even a long time before I could dilate the os tincae, so as to reduce the shoulder and part of the arm ; and much longer still before I could satisfy myself completely as to the exact position of the child. I found, however, at last, after great bodily fatigue, and after my arms and fingers were almost numbed, the right axilla ; from which, using my finger like a hook, I drew down the right arm. I then soon after reached the feet, one by one, and brought them down. The turning having been completed, I brought down the body easily and gradually. The head, however, was large ; and I found it so completely wedged in the brim, that the greatest caution was necessary, especially in such a state of the parts, to prevent separation. I, however, accomplished also a complete delivery of the head, by introducing my hand, insinuating my forefinger into the child's mouth, and bringing down the lower jaw. I then made use of my hand to compress the bones as much as possible ; and effected the business in a very satisfactory manner.

After giving the poor woman a little respite, I again introduced my hand, and found the secundines floating loose, and completely detached. I put my hand beyond, and scooped them down with the most perfect ease. I then laid my wearied patient to rest, gave her an anodyne, and left her.

I have since had the pleasure to learn, that, except a degree of debility and faintness for a few days, which might have been expected, she has had a fine recovery.

Thus ended a case, in all its circumstances a most unpromising one; for indeed it was attended with every possible disadvantage. If we consider, by way of recapitulation, 1<sup>st</sup>, That on the 28th May last she met with a shocking accident, which I believe to have been the immediate cause of the child's death: 2<sup>dly</sup>, That she was seized with labour pains upon the road, in very hot weather, a considerable distance from her own house, to which she walked: 3<sup>dly</sup>, That I was not called till the Wednesday following, the fifth day from the commencement of labour, and one of the hottest this season: And, 4<sup>thly</sup>,

*4thly*, That by the time I reached the house, her strength was exhausted, her pulse scarcely to be felt, and not a single natural pain to assist during the whole period of manual operation. Add to all these unfavourable circumstances, the rigid and contracted state of the parts, induced by such a continuance of drain, as well as probable absorption; a pelvis rather narrow than otherwise; a large child lying across, and so high, that it was long, with all my efforts and address, before I could either ascertain its real position, or bring down any part of it. From all which, I consider this case, from its terminating successfully, as entitled to a place among the most remarkable upon the records of obstetrical practice. I can only say for my own share, I proceeded through the different steps with a degree of diffidence, but at the same time with great steadiness and caution; and, no doubt, my satisfaction on the completion of the business was equal to my former anxiety and regret.

The poor woman was so full of the idea of her approaching dissolution, that she had taken a most affectionate and solemn (to me



a most affecting) leave of her disconsolate husband about a quarter of an hour before I brought down the arm. However, I was thence enabled to give them all a good deal of encouragement, from the prospect I then had of effecting a complete delivery.

X.

## X.

*History of a Case of a Puer Cæruleatus, which was observed at Glasgow. Communicated to Dr Duncan, by Dr William Nevin, from Downpatrick, Ireland.*

THE following curious case, of a preternatural conformation of the heart, which occurred in a child that died here in the course of last Winter, may not be altogether unworthy your notice, nor unsuitable, perhaps, to the design of your amusing and instructive Commentaries. Similar cases are to be found on record; they are, however, few in number; nor should any opportunity be lost of ascertaining and communicating the causes of those hidden and incurable maladies which arise from the malconformation of particular organs, as it is by such means we are often enabled, in uncommon and hopeless affections, to speak

X 3

with

with a confidence creditable to ourselves, and which will not disappoint the trust that is reposed in us. It is a valuable admonition of Celsus, “ Ante omnia scire medicus debet, quæ insanabilia sunt, et quæ difficilem curationem habeant, quæ promptiorem.” I am,

S I R,

With great respect,

*Glasgow, July 27.*

Your's, &c.

1794.

WILLIAM NEVIN.

ARCHIBALD BELL was born 3d June 1793, of poor parents. Nothing remarkable was perceived about the child for some time after his birth. Towards the end of July he was frequently attacked with difficulty of breathing, and seemed as if he laboured under load and oppression at the præcordia; his colour was also observed to be variable, and frequently changed to a sub-livid hue, especially on his toes and fingers. These attacks being slight at first, were little regarded; they had not any visible effect on the child's general health, as, when free from them, he appeared perfectly easy, suckled freely, and thrived apace. About the be-

ginning



ginning of October, however, the attacks became much more frequent and severe, and observed pretty regular periods, occurring about ten o'clock in the morning, and ceasing gradually about two P. M. During their continuance, the child seemed to suffer the deepest distress. His respiration became quick, laborious, and attended with frequent catchings, as if he sought instinctively to free himself from some inward oppression; his pulse was small, frequent, and intermitting, fluttering often with incredible rapidity, and as often suspended for two or three pulsations; the carotids throbbed violently, and strong workings and palpitations were felt, and sometimes heard, about the region of the heart. The most remarkable circumstances, however, were the complete change of colour which took place over the whole body, and the great diminution of its natural temperature. The skin every where, but particularly on the lips, tongue, fauces, fingers, toes, præputium, and glans penis, was dyed of a deep purple or claret colour, and the body felt to the hand perfectly cold. Nothing, indeed, seemed to contribute so

fenfibly to his relief as external heat. The face was livid and fwollen, the head forcibly drawn back, the eyes fteadily fixed, and the whole countenance expreffed the ftrongeft marks of threatening fuffocation. His fufferings through the whole of the fit were not, however, equally fevere; at times he would breathe with more freedom, and enjoy a temporary refpite; when fuddenly all the alarming fymptoms would return, not without apprehenfion of infant ftangulation. Towards the end of the paroxyfm, he had generally two or three loofe ftools, after which he enjoyed for an hour or two a calm and refreshing fleep, and awaking, appeared perfectly eafy, and fought for the breaft. In a few hours after this, the fkin regained its natural colour.

It was during one of thefe paroxyfms, in the month of December, I firft faw him, being afked to vifit him by the medical gentleman under whose care he had for fome time been. On attentively confidering the child's fituation, but particularly the unnatural colour, and deficiency in the heat of the body, I could not help fufpecting, that  
fome



some very singular conformation of the heart existed, and that there was some preternatural communication, by which the venous blood could circulate through the system without undergoing in the lungs those changes, so necessary to render it arterial and fit for supporting the proper temperature of the body. I was indeed the more confirmed in this opinion, from the great resemblance which this case bore, in all its symptoms, to that related by Dr Sandifort. One difficulty, indeed, naturally presented itself, Why these paroxysms should return periodical-ly? In Dr Sandifort's case the symptoms were not always equally severe, but returned with occasional exacerbations. Matters remained pretty much in the same situation for two months, except that the fits frequently occurred during the night, and were then remarkably severe. During a very violent struggle, the child died on Saturday, 30th March, 1794. Permission was readily obtained to examine the body. On opening the thorax, and cutting through the pericardium, the heart appeared much larger than usual, and the coronary veins re-  
markably



markably turgid. The aorta, at its origin, was considerably enlarged; and on laying open the different cavities of the heart, it was found, that the aorta arose equally from the anterior and posterior ventricles, and that a finger could readily be introduced into it from each: the semilunar valves were found; but those of the pulmonary artery, which was remarkably contracted in its size, were firmly attached by their apices to the internal coat of the artery, and felt at their bases, as if in some degree ossified. The ductus arteriosus was closed. The foramen ovale was open, and admitted a large probe. The anterior ventricle was considerably enlarged in its capacity. The carotid and subclavian arteries arose by separate trunks on each side from the arch of the aorta.

This valuable preparation is now deposited in the collection of Dr Jeffray, professor of anatomy in this place. Many interesting inquiries naturally arise from the consideration of the situation of this unfortunate child. We have here a very striking illustration of the present doctrine of respiration, which reflects such honour on the chemists and physiologists

fiologists of the present day. In the case before us, in that related by Dr Sandifort, and in one lately published by Mr Abernethy of London, we have, in my opinion, a full confirmation of the conclusion, That the action of respirable air on the blood, during its passage through the lungs, is absolutely necessary for the support of life, and the generation of animal heat. Could life, it may be asked, be continued by a heart thus strangely constructed? Dr Sandifort's puer cœruleatus lived eleven years, and was well grown for his age: there appeared no defect in the growth of this child. As, from the unnatural communication between the anterior and posterior cavities of the heart, we are in such cases deprived of the opportunity of influencing the blood by artificial respiration, could any benefit be derived from the transfusion of arterial blood?



## XI.

*Account of a singular Periodical Discharge of Blood from the Urethra, terminating successfully. Communicated to Dr Duncan by Mr Charles Stewart, Surgeon at Archangel.*

**J.** VERNEZOBRE, aged 51, complains of severe pain in the region of the kidneys, shooting downwards to the ossa pubis and groins. The skin, externally, is not discoloured, nor is the pain increased upon pressure, but it is much aggravated by motion of the body. He has had a periodical discharge of blood from the urethra for these eight months past; the hemorrhage usually lasts three days; is discharged with the urine; and the quantity which comes away at each period, is not less than eight ounces. During the interval, the urine is sometimes of a natural colour, occasionally turbid, and deposits a whitish branny sediment. Pulse of natural frequency, but very feeble. Belly natural.



natural. Appetite not much impaired. Sleep generally bad. He is very much emaciated, and too feeble to support himself in an erect posture.

About a year and a half ago, he says, that his body, face, and extremities, were covered with blotches, containing matter of a purulent nature, which gradually disappeared upon using some medicines; and he remained free from any complaint, except great debility, till the commencement of the present disease.

The practitioners attending, enjoined a strict adherence to the antiphlogistic plan of cure; this he has implicitly followed to its greatest extent: he has occasionally used the warm bath, with medicines calculated to promote the cuticular discharge.

Upon my arrival here, from the extreme degree of debility, agreeable to the opinion of the attending practitioners, he could not survive more than a month. Upon making myself acquainted with the particulars of his case, and observing the little success in the plan of cure he had hitherto followed, I began by prescribing a nourishing diet, frequently

quently repeated during the day, but in small quantity at a time, with a moderate allowance of port-wine suited to the degree of debility. At the same time, I ordered the following prescription :

℞ Tincturæ Thebaicæ,

Liquor. Æther. Vitriol.

Spt. Sal. Ammon. simp. *aa.* unc. i. Misce.

Of this mixture he was directed to take a tea-spoonful, thrice a day, in a small glass of wine.

I soon had the satisfaction to observe an evident amelioration, as he found the pains easier, with a considerable acquisition of force ; but the periodical hemorrhage was yet to decide, with what propriety I had made such a change in the plan of cure.

The patient himself was under the greatest anxiety, from a report circulated by the former practitioners, that at the usual return of the discharge of blood, he would from its profuseness inevitably bleed to death. To my great comfort however, and agreeable to the opinion I had formed, the hemorrhage, though it returned regularly, was very much diminished in quantity : instead of continu-  
ing



ing to tinge all the urine made during the space of three days, of a deep red colour, the first time of making it, it was only slightly coloured; and at the second discharge, was perfectly free of any appearance of blood.

Thus hitherto successful, I did not hesitate to continue the plan, expecting, that against the approaching periodical hæmorrhage, such a change may have been produced in the system, that he might pass the time of its usual return without its appearing. In conformity to my expectation, so it happened. He, however, experienced the symptoms which used to precede the discharge; as stupor and sense of fulness about the head, with other symptoms of plethora. His strength was now considerably recruited, and the pain in the region of the kidneys much less. To accompany the medicine formerly prescribed, I now added a small wine-glassful of the following mixture:

℞ Pulv. Cortic. Peruvian. opt. unc. i.

Mucilag. G. Arabici unc. ii. Terantur bene simul, dein adde durante trituratione Aquæ fontis unc. v. Aquæ Cinnam. sine vino unc. i. Misce.

He



He was likewise now allowed a wine-glassful of porter now and then, during the day.

Three months from the time of paying my first visit, he was able to walk about the chamber, and, during fine weather, to take gentle exercise in a carriage. By perseverance in the above plan, he was, at the end of five months, free of any complaint, and able to attend his business in a counting-house.

## XII.

*Account of the Effects of a Solution of Arsenic in the Cure of Remittent Fever. Communicated in a letter to Dr Duncan by Dr Thomas Fowler, Physician, York.*

WHEN I published the medical reports of the effects of arsenic in the cure of agues, the examples of its success in the treatment of remittents, (which I consider only as a modification of the intermitting fever), were not so numerous as I could have wished. I shall therefore esteem it as a favour, if you will please insert in your Commentaries, the following account of the effects of the solution in my own case, as an example of its success in the treatment of the remitting fever; and you will much oblige your affectionate and faithful friend,

THOS. FOWLER.

In August 1786, I was cured of a remittent fever with the quotidian type, of *nine days continuance*, by taking eight drops of the mineral solution three times a day for five days.

In July 1790, I was likewise cured of a remittent fever with the same type, of a fortnight's continuance, by taking eight drops of the mineral solution twice a day for four days.

In the latter end of August 1790, I was cured of the same fever and type, of four days continuance, by taking ten drops of the mineral solution twice a day for five days.

In January 1791, I was cured of the same fever and type, of two days continuance, by taking about ten drops of the mineral solution twice a day for four days.

#### OBSERVATIONS.

About the middle of July 1786, when 49 years of age, I was seized with a slow fever, for which I took medicines, and made a considerable progress in recovery before the end of the same month.

On



On the 9th of August following, whilst recovering from the febrile debility, I was seized with a strongly marked remittent fever, for which I took twelve half dram doses of the powder of the red Peruvian bark; but the stomach and bowels being much disturbed with the medicines, and the fever still continuing, I discontinued the bark, and began to take the mineral solution, which was attended with the desired effects, and was repeated in the subsequent attacks, with the success which has been described.

The medicine sat perfectly well on the stomach, and had no other operative effect than that of gently opening the body, the same as if a little manna had been taken for that purpose.

The febrile exacerbations were always abated, either on the first or second day of every course of the medicine; when the appetite began to return, and by the time each course was finished, the febrile symptoms were entirely gone.

I am doubtful, whether the fever in August 1790, ought to be considered as a re-

lapse, or as a distinct attack; only eight doses of the solution, of eight drops each, being taken in the space of four days, in the preceding fever of July; which was a less quantity of the medicine than had been given in the other three courses. The curative effects, however, of the medicine, during each period of its administration, were certainly very pointed, and finally successful.

## XIII.

*History of a Tetanic Affection, terminating favourably. By Mr William Ellis, Surgeon.*

A New negro wench of Mr John Dunn's, who had been washing clothes at the river, came home to all appearance perfectly well ; she slept in a warm chamber. In the morning, she had not risen so early as usual ; her mistress went to her room ; found her with a tetanus ; her jaws strongly locked ; spasms very rigid of the cervical muscles. Upon inquiry I found, that about eighteen days previous to that time, she had a ragged piece of pine wood run into her foot, which was extracted with some difficulty. As I never had one patient out of a great number that ever did recover, when the locked jaw came on, either from lacerated wounds, or puncture in the foot, I gave not the least hopes. I examined the part ; it appeared dry. I cut down the  
Y 3 skin ;



skin; and the puncture that had been made was very perceptible; but no matter, or any thing extraneous, could be discovered. I ordered her mouth to be tried to get it open, to administer something, but without effect. I immediately applied a caustic to the puncture; put her into a warm bath, keeping out the wounded foot where the caustic was; then wrapped her in a blanket. We tried to open her mouth, and, with great force, got it nearly to take a crown piece. I ordered laudanum very freely, but she could not swallow. I gave æther and camphire, which she held in her mouth, and gave her some relief; but swallowed not a drop. I ordered a clyster with tart. emetic. drach. i.; it procured no stools, but was succeeded by a profuse sweat. Four hours after, she had another clyster, with tart. emetic. drach. i. Half an hour after, she had a stool; and vomited twice. About half an hour after this, the spasms of the cervical muscle were less violent. She began to drink, and open her mouth well. I took off the caustic. She had three spoonfuls of ol. Ricin. given her, which procured plenty of stools. In the night, she had a slight return;

turn ; but it went off before I saw her. I put her upon bark and fetids ; she kept very well ; except the healing of the eschar, which was deep ; and it was some weeks before it could be healed. I should observe, that I rubbed in mercury ; but it could not have had the effect the lovers of it suppose.

Y 4

SEC-

## S E C T. III.

## M E D I C A L N E W S.

---

**N**O subject of investigation has for many years presented itself to medical practitioners, claiming more serious attention, than the very alarming fever which, with such fatality, has of late prevailed in several of the West India islands, and some parts of the continent of America, particularly in Philadelphia. Those practitioners who have had an opportunity of seeing most of this disease, are by no means altogether agreed in opinion, either respecting the nature of this affection, or the most successful mode of cure. Different publications have already

dy



dy appeared respecting it, and some others will soon appear. Of the most important of these we shall probably give an analysis in a future volume. In the mean time, we shall present to our readers some articles of information respecting it, which have appeared in different newspapers, and which even those whose notice they have not escaped may yet wish to have preserved in this work.

In the Federal Gazette of Philadelphia, a letter was published, written by Dr Benjamin Rush of that city, to Dr John Rodgers, physician in New York, giving an account of the origin, symptoms, and treatment of the epidemic fever which at that time prevailed in the city of Philadelphia, in the following terms.

“ MY DEAR FRIEND,

“ IN compliance with your request, I sit down at a late hour, and after a very busy day, to give you a short account of the origin, symptoms, and treatment of the fever which has prevailed with so much mortality in our city for the last six weeks.

“ I

“ I shall begin by observing, that I have satisfactory documents to prove, that the disease was generated in our city. To suppose, because the Yellow Fever is an endemic in the West Indies, and because it seldom occurs in North America, that it can exist among us only by importation, is as absurd as to suppose, that the hurricanes, which are so common in the West Indies, and which occur here only once in twenty or thirty years, are all imported from that country.

“ The disease attacks in a variety of ways, according to the habit and predisposition of the patient, or the nature and force of the exciting cause. It sometimes comes on in the form of a regular quotidian or tertian. Many are indisposed for two or three days, with headach, and pains in the back, sides, and bones, without much perceptible fever. But in a majority of cases it attacks with headach, sickness, or vomiting, and severe pains in the limbs or back. The pulse, in this state of the disease, since the 10th day of September, has generally been full and tense, and tongue whitish and moist, the eyes red, the pupils dilated, the urine high-coloured,

coloured, the thirst great, and the skin hot and dry. These symptoms remit every day, or every other day; and from the tertian type, which is its original and natural form, a recovery or death generally happens, in acute cases, on the third, fifth, or seventh days. It attacks all ages; even young children are not exempted from it; but it is most acute and most mortal in persons between fourteen and twenty-five years of age.

“ Before the 10th of September, I found strong purges of calomel and jallap alone sufficient to conquer it in most cases \*. They brought away large quantities of green, dark-coloured, or black bile, of a most fetid and acrid nature. The pulse, which in the warm weather was weak and low, rose with every evacuation; the skin likewise, which remained dry under the most powerful sudorifics, became moist under the use of those active remedies.

“ Since

\* Each purge consists of 10 grains of calomel, and 15 of jallap. One should be given every six hours, until four or five large evacuations are procured from the bowels.



“ Since the 10th of September, I have found bleeding, in addition to the mercurial purges, to be necessary in nineteen cases out of twenty. The pulse, the appearance of the blood, the spontaneous hemorrhages, and the weather (exclusive of the stimulus of contagion), all indicated the use of the lancet. At first, I found the loss of ten or twelve ounces of blood sufficient to subdue the pulse. But I have been obliged gradually, as the season advanced, to increase the quantity to sixty, seventy, or even eighty ounces, and in most cases with the happiest effects. I have observed the most speedy convalescence where the bleeding has been most profuse; and as a proof that it has not been carried to excess, I have observed in no one instance the least inconvenience to succeed it.

“ I have bled in three cases where I have seen incipient petechiæ, and in each case with success. I was warranted in this bold practice, not only by the tension of the pulse, but by a precedent for it, which I recollected in the works of Dr de Haen of Vienna.

“ I bleed not only in the exacerbations of the fever, but likewise in its remissions and intermissions,

intermissions, where I find a low, flow, but corded pulse. I have recovered two patients with this pulse, in whom it beat less than fifty strokes in a minute.

“ On every day of the disease, after giving a mercurial medicine, I prescribe a purge. Castor oil, salts, cream of tartar, sulphur, and glysters, answer in most cases; but in some I have been obliged to have recourse to calomel and gamboge in moderate doses \*. I was led to purge every day, not only by recollecting the advantages of that practice in the Yellow Fever of 1762 in carrying off the accumulated bile, but by observing the disease in all cases to attack a weak or previously disordered part of the body. The purging creates an artificial weak part, which, by inviting a determination of the fluids to the bowels, prevents those effusions in the brain, stomach, bowels, liver and lungs, which bring on death.

“ I

\* Each dose consists of two or three grains of calomel, and two grains of gamboge, made into a pill, with a little flour and common syrup. A dose should be given two or three times a day, so as to procure large evacuations from the bowels.

“ I have, in nearly every case for the three last weeks, rejected \* bark, wine, and laudanum, in the first stage of the disorder, even though the most perfect intermission of fever took place. Nor did I conceive those medicines to be necessary in the convalescent state of the disease. Mild and nourishing diet restores the strength much sooner than the most powerful tonics. I have reason to believe

\* The bark has been recommended as a preventive of the fever. However proper it might have been during the warm weather, I am satisfied that it is not so now. So universally is the contagion diffused through every part of the city, that out of a great number of persons in apparent good health, whose pulses I have examined, I have met with only two in whom they were not fuller and quicker than natural. In two old persons, in good health, between 70 and 80, the pulse beat between ninety and an hundred strokes in a minute. I have found this preternatural fullness and quickness in the pulses of black as well as of white people, also in a woman who had the Yellow Fever in 1762. This state of the pulse cannot be ascribed to fear, for that passion weakens it. The only preventives that experience warrants are, a temperate diet, the loss of a little blood, and the keeping the bowels gently open. To these should be added great caution in avoiding fatigue, the hot sun, and the night air.



believe laudanum to be poison when given with an active and corded pulse in this fever.

“ The next articles to purging and bleeding, in my *Materia Medica*, are cool air and cool drinks. I often directed the head to be bathed, and the hands and face to be washed with cold water. Toast and water, balm tea, lemonade, tamarind water, barley water, and apple water, are the common drinks of my patients. The less they eat in the first stage of the disorder the better. As soon as the pulse is reduced, I indulge them in wine whey, bread, or roasted apples; or mush in milk, chicken, beef, mutton, or veal broth, coffee and tea, with buttered toast, and weak chocolate. I forbid the use of animal food until they are able to walk about. Cleanliness is advised in every stage of the disorder, with gentle exercise and country air to complete the cure.

“ In those cases where the disease comes on with typhoid and typhus symptoms, I recommend the common remedies for those states of fever.

“ If sufficient bleeding and purging have been omitted in the beginning of the disorder,

der, and hemorrhages with petechiæ, a low pulse, and black vomiting, have come on, little can be done. The ceremonies of bark glysters, and the cold bath, may be performed in such cases ; but I have heard of no instance in which they have done any service.

“ I think I have seen blisters afford relief in local determinations to the head, breast, and stomach, after sufficient evacuations have been used.

“ Where a troublesome vomiting does not yield to bloodletting, I know of no remedies equal to a table-spoonful of sweet milk given every half hour, or weak camomile tea.

“ Where a dull pain of the bowels attends with a full or corded pulse, I have prescribed glysters of cold water with evident advantage. Where flatulency attends, I prescribe camomile tea, or weak brandy and water, provided the pulse be sufficiently reduced.

“ By means of the remedies before mentioned, I think I was the unworthy instrument in the hands of a kind Providence of recovering more than ninety-nine out of an hundred

hundred of my patients before my late indisposition. A number died during the few days of my confinement, from the want of well-timed bleeding and purging. Since my recovery, the disease has become more violent and obstinate, and some have died under my care, from my inability, by weakness and occasional returns of my fever, to be early and punctual in my attendance upon them; for a recovery often depends upon the application of the remedies, not only on a certain day, but frequently at a certain hour. The concentration of the contagion in every part of the city, moreover, has increased the difficulty of curing the disease; for it constantly counteracts the use of the remedies which are intended to abstract stimulus. Hence we observe, other circumstances being equal, there is most mortality where there is most contagion. The delays in procuring bleeders, and the ignorance or neglect of nurses, added to some other circumstances too gloomy to be mentioned, have contributed very much of late to increase the mortality of the disorder. But with punctual and skilful medical assistance, good



nurses, and airy rooms, I am still of opinion that this disease is as much under the power of medicine as the measles or influenza.

“ The newspapers have informed you, how much the opinions and practice I have delivered in this letter have been opposed by many of the physicians of our city. They first called the prevailing epidemic the jail fever. They might as well have called it the small-pox. They have declared that we have two distinct fevers in town, the one a putrid yellow fever, the other a common remittent. It would not have been more absurd to have asserted, that we have two suns and two moons shining upon our globe. What makes this mistake the more excusable is, the common remittent fever, which has been confounded with the present highly contagious epidemic, has not been observed as usual in the suburbs, or in the neighbourhood of the city.

“ But the mistakes of some of my brethren have not ended here. Where the disease has made its chief impression on the head, it has been called the internal dropsey of the brain ; where it has attacked the throat, as  
it

it has done in some mild cases, it has been called an angina maligna; where it has attacked the sides, it has been called a pleurisy; and in one person in whom it first affected the bowels, it was treated as a bilious colic. The disorder in this case terminated in black vomiting, and death on the third day.

“ The success of the new remedies has at last created such a clamour in their favour, that most of our physicians have been forced to adopt them. They bleed however, as yet, sparingly, and purge after the first day only with lenient physic. Some of them blend wine, bark, and laudanum. They might as well throw water and oil at the same time upon fire to extinguish it.

“ I must here pay a tribute of respect to my much loved friend Dr Pennington, who adopted the new remedies as soon as they were mentioned to him. His expanded mind was not cast in a common mould: it vibrated in unison with truth, the moment it came in contact with it. My excellent and judicious friend Dr Griffiths was likewise an early and decided friend to plentiful purging and bleeding. Such of my former pupils as

are settled in this city recommended them, and, I hear from all quarters, with great success.

“ It was extremely unfortunate that the new remedies were ever connected with my name. I have no other merit than that of having early adopted and extended a mode of treating the disorder which I had learned in the year 1762, from my first preceptor in medicine Dr Redman, and which is strongly recommended by Hillary, Moseley, Mitchell, Kirby, and many other writers upon that fever. In my first address to the public, I acknowledged that I received the first hints of the safety and efficacy of jallap and mercury in the military hospitals in the year 1777, and from a description of a disease nearly related to ours in an East-India publication.

“ In the use of all my remedies, I have in this disease repudiated names, and been governed only by the condition of the system.

“ I am indebted to Dr Sydenham, as well as to my own observation, for the decided manner in which I have rejected the idea of a common remittent in our city. I have been told, that by propagating this opinion



I terrify my patients. Perhaps I do ; but I save them by their fears ; for I excite in them at once a speedy application for help, and a faithful obedience to all my prescriptions. Universal truth is universal interest ; and falsehood and misery always go hand in hand. The opinion which has been published by some of our physicians, that we have now a mild and a malignant fever in our city, has led all those people in whom the fever has come on in an insidious form, to neglect themselves for several days, under the idea that they had nothing but a common fall fever ; and from this deception, I believe hundreds have perished by the disorder.

“ I cannot conclude this letter without lamenting farther, that several publications from men who had never seen the disorder, or who had seen only a few cases of it, have contributed very much to distract the public mind, to lessen a confidence in mercurial purges and bleeding, to produce an indiscriminate use of general remedies without any respect to the state of the system, and thereby to add to the mortality of the disease.

“ Adieu, my dear friend. I shall only add my prayers that your city may be preserved from the calamities which now afflict ours ; and that you may never know from experience, the labours, the anxiety, the deep domestic distress, and the calumnies, which for six weeks past have been the portion of your sincere friend,

“ And former preceptor in medicine,

“ BENJAMIN RUSH.”

“ *Philadelphia, 3d October 1793.*”

To this account of the disease given in Dr. Rush's letter, we shall subjoin an account of the morbid appearances which were discovered on the dissection of those dying of the disease, as observed by two intelligent and discerning physicians ; which account was also published in the newspapers.

“ Account of the Appearances observed on the Dissection of Patients dying of the Fever which raged at Philadelphia in Autumn 1793.

“ As it is of great importance to the community at large, that every circumstance of  
the

the disorder in Philadelphia should be fully known, we have a particular pleasure in having it in our power to publish the report of two very eminent physicians at Philadelphia, who were desired to give their opinion on the subject.

“ Being well assured of the great importance of dissections of morbid bodies, in the investigation of the nature of diseases, we have thought it of consequence that some of those dead of the present malignant fever should be examined ; and without enlarging on our observations, it appears at present sufficient to state the following facts.

“ 1. That the brain in all its parts has been found in a natural condition.

“ 2. That the viscera in the thorax are perfectly found ; the blood, however, in the heart and veins is fluid, similar in its consistence to the blood of persons who have been hanged, or destroyed by electricity.

“ 3. That the stomach, or beginning of the duodenum, are the parts that appear most diseased. In two persons who died of the disorder on the fifth day, the villous membrane of the stomach, especially about



its smaller end, was found highly inflamed; and this inflammation extended through the pylorus into the duodenum some way. The inflammation here was exactly similar to that induced in the stomach by acrid poisons, as by arsenic, which we have once had an opportunity of seeing in a person destroyed by it.

“ The bile in the gall-bladder was quite of its natural colour, though very viscid.

“ In another person who died on the eighth day of the disease, several spots of extravasations were discovered between the membranes, particularly about the smaller end of the stomach, the inflammation of which had considerably abated. Pus was seen in the beginning of the duodenum, and the villous membrane at this part was thickened.

“ In two other persons who died at a more advanced period of the disease, the stomach appeared spotted in many places, with extravasations, and the inflammation disappeared. It contained, as did also the intestines, a black liquor, which had been vomited and purged before death. This black liquor appears clearly to have been altered secretion  
from

from the liver ; for a fluid, in all respects of the same qualities, was found in the gall-bladder. This liquor was so acrid, that it induced considerable inflammation and swelling on the operator's hands, which remained for some days. The villous membrane of the intestines in these two last bodies, was found inflamed in several places.

“ The liver was of its natural appearance, except in one of the last persons ; on the surface of which, a very few distended veins were seen. All the other abdominal viscera were of a healthy appearance.

“ The external surface of the stomach, as well as of the intestines, was quite free from inflammation. The veins being distended with blood, which appeared through the transparent peritoneum, gave them a dark colour.

“ The stomach of those who died early in the disease, was always contracted. But in those who died at a more advanced period of it, where extravasations appeared, it was distended with air.

(Signed) “ P. S. PHYSICK.

J. CATHRAL.”

This

This very fatal fever has already been the subject of several publications. Dr Rush, in particular, besides the preceding letter, has published an octavo volume, extending to upwards of 300 pages, entitled, *An Account of the Bilious Remitting Yellow Fever, as it appeared in the city of Philadelphia, in the year 1793.* Another publication has also appeared, from the pen of Dr William Currie of Philadelphia, entitled, *A Treatise on the Synochus Icteroïdes, or Yellow Fever, as it lately appeared in the city of Philadelphia.* We are also informed by Dr Chisholm, a learned physician in Grenada, to whom we have often been indebted for valuable communications, that he has committed to writing his observations on this subject, and soon means to present them to the public. Of these publications, we intend to present an analysis to our readers in a future volume : and hope we may be able to point out, how far varieties in the appearance of the disease, requiring different treatment, took place in different situations. At present, we may only observe, that besides these, a short account of the yellow fever prevalent



valent in Philadelphia, was published by Mr Carey ; which, among other interesting particulars, contains a list of deaths in Philadelphia from August 1st to October 11th 1793, of all ages, sexes, and of every disorder. An abundant proof of the fatality of this disease is afforded, from contrasting the first eleven days of August, when the disease made its first appearance, with the first eleven days of October, when it may be considered as being at its height.

Days.	1	2	3	4	5	6	7	8	9	10	11	} Number of Burials.
August.	8	7	6	4	1	1	2	10	5	5	3	
October.	63	63	70	56	67	71	67	86	94	72	101	

Dr Currie, in his pamphlet, computes, that between the 1st of August and 10th of November, about 3500 persons died of the yellow fever in Philadelphia. He observes, that at one period, there appears to have been more than 8000 persons confined by it at one time, viz. about the middle of October, though the whole number of the inhabitants when the disease commenced, is not supposed to have exceeded 60,000 :  
and

and of these, at the time when the disease was most prevalent, near 20,000 are supposed to have retired from the city.

One of the points in which the physicians in Philadelphia have differed the most in opinion, is, whether it was to be considered as a disease originating in Philadelphia, or as arising from an imported contagion. And, notwithstanding the respectable authority of Dr Rush, who, as appears from the preceding letter, considered it as a disease originating among themselves, yet the latter opinion seems to have been most generally received, and to have obtained the sanction of the college of physicians of Philadelphia. Indeed, when we consider, that it is on all hands allowed, that the disease, after making its appearance, was propagated only by contagion, it seems much more probable, that the contagion itself was imported, than that it originated in Philadelphia; especially when we reflect, that at the time of its first appearance in that city, and for many months before, it had raged with great severity in different West-India islands, from whence there

there were frequent arrivals at Philadelphia.

\* \* \* \*

DR CHISHOLM of Grenada, in a letter to Dr Duncan, has transmitted the annexed account of a very extraordinary vegetable, indigenous in the Dutch colony of Demerary, which seems to possess singular specific efficacy in inflammation of the eyes.

Physicians, probably, are too confined in their idea of specifics. It is, at least, certain, that there are some medicines in common use among us, which the sons of nature, their discoverers, found literally specific; that is, strictly appropriated to the cure of certain endemial diseases of the country where they were produced; and there is not a doubt that many more are known to them, with which the physicians of Europe are totally unacquainted.

It is a rational position, and consistent with the benevolence of the Creator, that  
every



every climate should have, within itself, the means of curing those diseases to which it gives rise ; and as the endemics of no country on earth are more dangerous than those of many parts of the new continent, so there are none which yield so abundantly and spontaneously the appropriate remedies. The most remarkable instance of this that I am acquainted with, exists in the district of Guiana, in South America, called Demerary.

About fifty miles westward from the sea, a ridge of sand, of very considerable breadth and height, traverses the whole country, from north to south, forming so extraordinary a contrast to the flat low muddy surface of the rest of the colony, as to give room for the reasonable conjecture, that it once constituted the eastern boundary of this part of the continent. The anchors, and other appendages of ships stranded on this coast, found several miles inland, between the sandy ridge and the sea, one of which is said to have belonged to the ill-fated Raleigh, afford unequivocal proofs of the encroachment of this land on the ocean. The sand  
of

of the ridge is generally unmixed, of a most remarkable fineness, and of a dazzling whiteness; and although these circumstances might lead us to consider it as necessarily sterile, yet it abounds in the finest, largest, and greatest variety of the hard woods of America. In this tract of country, the hardwood cutters have settled; and being in some degree secluded from any other society, they form a distinct one of their own, possessing manners peculiar to themselves, or partaking much of those of the Arrowawks, the original owners of the country. It is a notorious fact, that both the European and aboriginal inhabitants of this sandy country, are remarkably subject to the ophthalmia membranarum. Whether the whiteness of the sand is the principal cause, or whether this be only secondary to the cold damp of the fogs which prevail in the interior country of Demerary, I cannot pretend to determine. The cure of this disease among the Indians, is astonishingly simple; and as they have lately communicated the means they use to the Europeans, the disease is now divested of all its terrors among them. By

a fortunate accident, their specific was communicated to me.

In July of the year 1790, happening to be at Demerary, curiosity induced me to visit the sand hills, or settlements of the hard-wood cutters. After surmounting the difficulties which the rapid and ample stream of the Demerary produced, and after insinuating through the long and winding course of the Kamavachy, we reached these settlements. At a Mr Edmunstone's, one of the wood-cutters, I accidentally plucked a twig of a vine, which grew in great abundance on the slope of a sand-hill near his house; on which, our landlord asked me if I knew the plant. On answering in the negative, he assured me it was one of the most valuable plants in the country; that its name among the Indians, was *Akuferunee*, but among them, the *eye-root*; and that its efficacy in curing inflammations of the eyes, was such, as exceeded any thing he had ever heard of. My curiosity being excited by this account, I inquired more particularly, and received the following information.

The



The juice of the Akuferunee is so effectual in curing inflammation of the eyes, that a single drop is sufficient to give immediate relief in the most obstinate cases ; and at the end of four days, or by the application of four drops, the cure is generally completed. The Indians use it in the following manner. After stripping off the outer rind or bark of the root, and drawing out the woody fibre which runs through the middle of it, they press the juice of the remaining pulpy part on a flock of cotton, which, when saturated with it, will serve several times. The remedy being thus prepared, they take a smooth green leaf, generally of the plant itself, and forming it into a kind of funnel, they introduce its spout between the eyelids, and gently press the cotton, so that only one drop may enter the eye. It was only about two years before this, that Mr Edmunston became acquainted with the eyeroot, and the manner of using it. At that time, and for several months before, he had been dreadfully afflicted with an inflammation in both his eyes ; and had in vain had recourse to medical assistance, and to every appli-

cation recommended to him. One day whilst shut up in a dark room, a neighbouring Arrowawk Indian called on him; and, on learning the cause of his confinement, assured him, he would speedily give him relief. He immediately gathered some of this root, formed his leaf-funnel, and pressed a single drop of the juice into each eye. On the following morning, he again called, and applied the remedy in the same manner. Mr Edmunston was now so much relieved, as to be able to bear the light. On the fifth day, after four drops had been pressed into each eye, the inflammation was totally removed. So extraordinary a cure, I must confess, appeared to me incredible; but, on my return to the settlements on the sea-coast, so many proofs were given me of the wonderful efficacy of the eye-root, as removed all doubt of Mr Edmunston's veracity.

On my return to Grenada in August, I had an opportunity of trying the remedy on two patients; one a porter negro, who had nearly lost the use of his eyes by the violence of the inflammation, the other a sailor of a Guinea ship, also nearly in the same state.

My

My partner, Dr Munro, had done every thing he could think of for the former, without any effect. The roots I had brought with me, were now so dry, as to oblige me to content myself with a very strong infusion of what had been the pulpy part, in boiling water. By means of a leaf-funnel, I introduced a few drops of the infusion into each eye every morning, for six days successively; and to my astonishment, at the end of that time, the inflammation was almost completely removed: and on the tenth day, the cure was perfect. Its effect in the sailor's case, was pretty nearly similar. These are the only cases in which I have been able to try it myself; but the proof they constitute of the efficacy of the eye-root, is so much the more convincing, as the form in which it was administered, was infinitely less powerful than the inartificial one of the Indians.

A very singular circumstance attending the application of this juice, is, that when the drop touches the eye, a sweetish bitter taste is instantly perceived on the tongue by the patient. The infusion, however, did not produce this effect. I know two gentle-



men of Demerary, who had a drop pressed into one of their eyes to ascertain this fact. The sweet taste was instantly perceived.

Since I left Demerary, the use of the eye-root has become more general; and I understand that it has proved uniformly beneficial in a surprising degree.

The Akuferunee of the Arrowawks, or the Wanfamey of the Akowais, a tribe farther inland, or the eye-root of the hard-wood cutters, as far as I know, seems to be peculiar to the sandy tracts of the southern continent of America; and, perhaps, chiefly to those of the Dutch colony of Guiana. With a view to introduce so valuable a medicine into this colony, I had about two dozen of the plants sent me from Demerary; the greater part of which, our worthy governor, General Mathews, planted in his own garden, where they throve remarkably well. On his Excellency's return to England in June 1792, he carried some with him, with a view of presenting them to the Botanical Professor at Oxford. That indefatigable, and very able botanist, Mr Anderson, has also raised a few plants in the  
botanical

botanical garden at St Vincent's ; and some are also thriving in Mr Jennings' garden at St Eustatia. I entertain some hopes, that this valuable plant may also be propagated in the botanical garden at Edinburgh, from the few specimens which I have now the pleasure of sending you by Captain Blair.

I have never seen the eye-root in flower ; but Mr Anderson, whose plants have flowered, has favoured me with the following botanical description ; from which, it appears to be a new species of the Bignonia, and may, I think, be best discriminated by a name implying its specific virtues, the Bignonia Ophthalmica.

Bignonia Ophthalmica. Syn. Eye-root or vine, Akuferunee. Wanfamey.

Foliis conjugatis cirrhosis : foliolis ovato-cordatis, integerrimis venosis, glabris, acuminatis, et punctatis. Floribus axillaribus spicatis, fecundis. Siliqua liniaris longissima glabra acuminata, marginibus punctatis. Frutex est, radices crassæ, lignosæ, cortice fungosa. Rami scandentes, glabri, teretes subvillosi. Folia omnia conjugata, figura cordato-ovata, lævia, venosa, glabra, ad apicem attenuata, cum acumine, subtus punctis atris

adsperfa. Petioli oppositi teretes, deinde brachiati, partiales, teretes, et fulcati. Cirrus axillaris apice tripartito. Flores ex axillis foliorum, in spicas longas digesti, pedunculi oppositi uniflori, ad basin bractæis tribus, minimis, subulatis. Calyx campanulatus laxus. Corolla campanulata, fulcata, secunda, putans, colore purpureo-albo. Siliqua gracilis, longissima, et glaberrima, lutea, cum acumine, marginibus utrinque punctatis.

\* \* \* \*

THE following extracts from a discourse on hospital duties, addressed to the gentlemen of the Faculty, the Officers, the Clergy, and the Trustees of the Infirmary of Liverpool, by the Reverend Thomas B. Percival, LL. B., &c. convey such important observations, particularly to medical practitioners, that we trust they will not be unacceptable to our readers. The discourse itself is to be inserted at full length, in the appendix to a code of Ethics and Institutes adapted to the Faculties of Physic and Surgery, and



and entitled Medical Jurisprudence, by Thomas Percival, M. D. F. R. S. &c. which we have already announced, and which has long remained in the press. The prosecution of this work, however, has been suspended by the death of a beloved son, for whose use it was peculiarly designed, who had nearly completed the course of his academical education, and whose talents, virtues, and acquirements, promised to render him an ornament to his profession. As it is uncertain when the undertaking will be resumed, a few copies of this discourse have been separately printed for private distribution among friends, with one of which we have been favoured. After some general observations on the wisdom, as well as the humanity of hospitals intended for the cure of disease, the author thus proceeds.

“ It were an easy and a pleasing task to enlarge on these general topics. But they come not sufficiently “ home to mens’ business and bosoms.” And honoured as I am, by being thus called to the privilege of addressing you, I feel it incumbent on me to

be more appropriate, by suggesting to your candid attention, the distinct and relative duties attached to the several orders, which compose this most excellent community. Permit me, therefore, to claim your indulgence, whilst I offer, with all deference and respect, but with the plainness and freedom of gospel sincerity, a few words of exhortation,

“ I. TO THE FACULTY ;

“ II. TO THE OFFICERS AND SUPERINTENDANTS ;

“ III. TO THE CLERGY ;

“ And lastly, TO THE GENERAL BODY OF TRUSTEES AND CONTRIBUTORS.

“ I. TO THE FACULTY. As man is placed, by Divine Providence, in a situation which involves a variety of interests and duties, often complicated and mixed together, the motives, which influence human actions, must necessarily be mixed and complicated. And wisdom and virtue consist in the selection of those which are fit and good ; and in the arrangement of all, by a just appreciation

pretiation of their comparative dignity and importance. In the acceptance of your professional offices in this INFIRMARY, it is presumed that you have been governed by the *love of reputation*; by the *desire of acquiring knowledge and experience*; and by that *spirit of philanthropy*, which delights in, and is never weary of well doing. Let us briefly consider each of these principles of action, and how they ought to be regulated.

“ If we analyze the *love of reputation*, as it exists in liberal and well informed minds, it will be found to spring from the love of moral and intellectual excellence. For of what value is praise, when not founded on desert? But the consciousness of desert, by the constitution of our nature, is ever attended with self-approbation: And this delightful emotion, which is at once the concomitant and reward of virtue, widely expands its operation, and animates, by a social sympathy, all who are the witnesses or judges of our generous deeds. From the same source, piety itself derives its origin. For how shall he *who loveth not*, or is regardless of the approbation of *his brother*,  
whom



*whom he hath seen, love or regard the favour of God, whom he hath not seen!*

“ But let us remember, not to substitute for the legitimate and magnanimous love of fame, that spurious and sordid passion, which seeks applause by gratifying the caprices, by indulging the prejudices, and by imposing on the follies of mankind. To court the public favour by adulation, or empirical arts, is meanness and hypocrisy; to claim it, by high and assumed pretensions, is arrogance and pride; and to exalt our own character, by the depreciation of that of our competitor, is to convert honourable emulation into professional enmity and injustice.

“ You have been elevated by the suffrages of your fellow-citizens: You have been honoured by their favour and confidence. Rejoice in the distinction conferred upon you; fulfil with assiduity and zeal the trust reposed in you; and by being *unwearied in well-doing*, rise to higher and higher degrees of public favour and celebrity!

“ The *acquisition of knowledge and experience* is a farther incentive to your generous exertions, in this receptacle of disease and misery.

mifery. It is one important design of the institution itself; which affords peculiar advantages for afcertaining the operation of remedies, and the comparative merit of different modes of medical and chirurgical treatment. For the ftrict rules which are enjoined, the fteadinefs with which their obfervance is enforced, and the unremitting attendance of thofe who are qualified to make accurate obfervations, and to note every fymptom, whether regular or anomalous, in the difeafes under cure, are circumftances incompatible with the ordinary domeftic care of the fick. To avail yourfelves of them, therefore, is agreeable to found policy, and confonant to the pureft juftice and humanity. For every improvement in the healing art is a public good, beneficial to the poor as well as to the rich, and to the former in a proportionably greater degree, as they are more numerous, and confequently more frequently the objects of it. On this point, however, peculiar delicacy is required; and as the difcretionary power with which you are intrufted is almoft without controul, it fhould be exercifed with the nicelt honour  
and

and probity. When novelties in practice are introduced, be careful that they are conformable to reason and analogy ; that no sacrifice is made to fanciful hypothesis, or experimental curiosity ; that the infliction of pain or suffering be, as much as possible, avoided ; and that the end in view fully warrant the means for its attainment.

“ But your noblest call to duty and exertion, arises from the exalted *spirit of philanthropy* : And, on this occasion, I may address you individually in the language of the first of orators to the sovereign of imperial Rome : *Nihil habet fortuna tua majus quam ut possis, nec natura melius quam ut velis, servare quamplurimos.* It is your honour and felicity to be engaged in an occupation which leads you, like our blessed Lord during his abode on earth, to *go about doing good, healing the sick, and curing all manner of diseases.* To you learning has opened her stores, that they may be applied to the sublimest purposes ; to alleviate pain ; to raise the drooping head ; to renew the roses of the cheek, and the sparkling of the eye ; and thus to gladden, whilst you lengthen life. Let this hospital



pital be the theatre on which you display, with assiduous and persevering care, your science, skill, and humanity : And let the manner correspond with, and even heighten the measure of your benevolence. With patience hear the tale of symptoms ; silence not harshly the murmurs of a troubled mind ; and by the kindness of your looks and words evince, that christian condescension is not incompatible with professional steadiness and dignity.

“ It is, I trust, an ill founded opinion, that *compassion* is not the virtue of a Surgeon. This branch of the profession has been charged with hardness of heart ; and some of its members have formerly justified the stigma, by ridiculing all softness of manners, by assuming the contrary deportment, and by studiously banishing from their minds that sympathy, which they falsely supposed would be unsuitable to their character, and unfavourable to the practical exercise of their art. But different sentiments now prevail. And a distinction should ever be made between true compassion, and that unmanly pity which enfeebles the mind, which shrinks  
from

from the sight of wo, which inspires timidity, and deprives him who is under its influence of all capacity to give relief. Genuine compassion rouses the attention of the soul, gives energy to all its powers, suggests expedients in danger, incites to vigorous action in difficulty, and strengthens the hand to execute, with promptitude, the purposes of the head. The pity which you should repress is a turbulent emotion. The commiseration which you should cultivate is a calm principle; it is benevolence itself directed forcibly to a specific object; and the frequency of such objects diminishes not, but augments its energy; for it produces a tone or constitution of mind constantly in unison with suffering, and prepared, on every call, to afford the full measure of relief. Appear, therefore, to your patients to be actuated by that fellow-feeling, which nature, education, and christianity require. Make their cases, in a reasonable degree, your own; *and whatsoever ye would that men should do unto you, do ye even so unto them.*

“ II. To you, the OFFICERS and SUPERINTENDANTS of this hospital, we cannot but ascribe

ascribe views the most pure and public-spirited. But zeal in the cause of charity, however sincere, can only be rendered usefully efficient by due attention to, and steady perseverance in the wisest means for its accomplishment. On the mistaken humanity of crowding your wards with numerous patients, by which disease is generated, and death multiplied in all its horrors ; on the fatal calculation of savings in medicines, diet, or clothing ; and on a strict attention to ventilation, cleanliness, and all the domestic arrangements, which have order, utility, or comfort for their objects ; I trust it is needless to enlarge. But you will suffer me, I hope, to offer a few hints on the *moral* and *religious* application of the institution which you govern ; a topic hitherto little noticed, though of high importance.

“ The visitation of sickness is a wise and kind dispensation of Providence, intended to humble, to refine, and to meliorate the heart. And its salutary influence extends beyond the sufferer, to those relatives and friends, whose office it is to minister unto him ; exciting tenderness and commiseration ;



tion ; drawing cloſer the bonds of affection ; and rousiſg to exertions, virtuous in their nature, profitable to man, and well-pleaſing to God. A parent ſoothed and ſupported under the anguiſh of pain by the loving-kindneſs of his children ; a huſband nurſed with unwearied affiduity by the partner of his bed ; a child experienciſg all the tendereſs of paternal and maternal love, are ſituations which form the ground-work of domeſtic virtue and domeſtic felicity : They leave indelible impreſſions on the mind ; impreſſions which exalt the moral character, and render us better men, better citizens, and better chriſtians. It is wiſdom, therefore, and duty, not to fruſtrate the benevolent conſtitutions of Heaven, by diſſolving the ſalutary connections of ſickneſs, and tranſporting into a public aſylum thoſe who may, with a little aid, enjoy in their own homes, benefits and conſolations which, elſewhere, it is in the power of no one to confer.

“ But numerous are the ſufferers under ſickneſs and poverty, to whom your hoſpitable doors may be opened, with the higheſt moral benefit to themſelves and to the community.

munity. When admitted within these walls, they form one great family, of which you are the heads, and consequently responsible for all due attention to their present behaviour, and to the means of their future improvement. Withdrawn from the habitations of penury, sloth, and dirtiness, from the conversation of the loose and the profligate, and from all their associates in vice, they may here form a taste for the sweets of cleanliness, learn the power of bridling their tongues, and be induced, by this temporary absence, to free themselves from all farther connection with their idle and debauched companions. Let it be your sedulous care to foster these excellent tendencies: Encourage in the patients every attention to neatness: Tolerate no filth or slovenliness, either in their persons or attire: Keep a strict guard on the decency of their behaviour: Urge them to active offices of kindness and compassion to each other: Furnish the convalescents with bibles, and with books of plain morality and practical piety, suited to their capacities and circumstances, and which will neither delude the imagination, nor perplex the understanding: Oblige them to a

regular attendance on the public worship of the hospital, or of their respective churches : And, agreeably to your laws, neglect not to make provision for the stated and frequent administration of the holy sacrament. There is something in this office peculiarly adapted to comfort and fortify the mind under the pressure of poverty, pain, and sickness. In the contemplation of that love which Christ manifested for us by his sufferings and death, all the consolation is experienced which divine sympathy can afford. *We have a high-priest touched with the feeling of our infirmities ; and who holds forth to us this soothing invitation, Come unto me, all ye that are weary and heavy laden, and I will give you rest.* Promote the celebration of an ordinance, adapted thus to fill the mind with gratitude, and to alleviate every wo. And let the example of our Saviour's resignation to the appointments of God be enforced by it, who in his agony exclaimed, *Father, if it be thy will, let this cup pass from me ; nevertheless not my will, but thine be done.*

“ III. I doubt not the cordial and entire concurrence of you, my Reverend BRETH-

REN



REN the CLERGY, who officiate in this hospital, in the recommendation of the holy sacrament, not only as a stated, but as a frequent ordinance of the institution. With you it will rest to obviate every objection to the rite, and to give it the full measure of spiritual efficacy. Enthusiasm and superstition cannot be dreaded in the offices of rational piety, conducted by those who are rational and pious; and you will neither betray men into a false confidence, nor alarm them, when languishing under sickness and pain, with unseasonable terrors. *The spirit of a man may sustain his infirmities, but a wounded spirit who can bear?* Under such circumstances, vain will be the aid of skill or medicine, without the supports and comforts which it is your sacred function to afford. You can

——— “ minister to a mind diseas’d;

“ Pluck from the memory a rooted sorrow,

“ Raze out the written troubles of the brain,

“ And, with some sweet oblivious antidote,

“ Cleanse the full bosom of that perilous stuff

“ Which weighs upon the heart.”

SHAKESPEARE.

“ Being thus the *Physicians* of the soul, you are essential constituents of this enlarged system of philanthropy. Apply, therefore, with diligence and zeal, the spiritual *medicines* which it is your office to dispense. Here you have a wide field *for exhortation, for correction, and for instruction in righteousness*. Convalescence peculiarly furnishes the *mollia tempora fandi*, the soft seasons of impressive counsel. The mind is then open to serious conviction, disposed to review past offences with contrition, and to look forward with sincere resolutions of amendment. Many diseases are the immediate consequences of vice; and he who has recently experienced the sufferings of guilt, will deeply feel its enormity, and cherish those precepts which will secure him from relapse, and convert his past misery into future blessings.

“ LASTLY. But this large aggregate of good, which it is the design of the present anniversary to commemorate, depends, for its support and extension, on the GENERAL BODY OF CONTRIBUTORS to the charity. How deeply interesting, then, are the claims which your fellow-citizens have to make on  
your

your philanthropy ! How important is it to the health of thousands, in rapid succession, that you should persevere in beneficence, and continue unwearied in well-doing ! Ordinary bounty terminates almost in the moment when it is bestowed. The object of it being withdrawn, solicitude and responsibility are no more. But in this noble institution, charity exerts itself in steady and unceasing operations. It is a stream ever full, yet ever flowing ; and through the grace of God, I trust, will be inexhaustible. From your zeal, your concord, and liberality, these *sacred waters of life* proceed. Be watchful that they are not poisoned in their source, nor contaminated in their progress. Let your *zeal* be employed in searching out and recommending proper objects of relief. *Call to you*, according to the injunction of our Saviour, *the halt, and the maimed, the lame, and the blind ; for they cannot recompense you : Ye shall be recompensed at the resurrection of the just.* Suffer no prejudices, either political or religious, to contract the bounds of your charity. *Pass not by, on the other side, from a fellow-creature who has fal-*



*len amongst thieves*, because he is not of your party, of your sect, or even of your nation ; but, like the good Samaritan, *have compassion on him, and let oil and wine be poured upon his wounds*, in this hospitable *Bethesda*. Guard, most sedulously guard, against the spirit of dissension. You are united in the labours of christian love ; and having one common and glorious cause, the contest should be for preeminence in doing good, not for the gratification of pride, the indulgence of resentment, or even for the interests of friendship. To your liberality in contribution no appeal can be required ; no new incitement can be urged. What your judgment approves, what experience has sanctioned, and what touches the tenderest feelings of your hearts, must have pleas that are irresistible.”

\* \* \* \*

ALTHOUGH, in the conduct of this work, it has been our endeavour, on all occasions, to avoid personal controversies as much as possible, yet we flatter ourselves our readers will not blame us for deviating from our usual

usual plan, by giving a place to the following extract from the records of the Royal Medical Society of Edinburgh, containing an answer to certain observations made by a late author, on a treatise, entitled, *An Inquiry into the Remote Causes of Urinary Gravel*, published at Edinburgh in the year 1792. The article here extracted was read before the Medical Society on the 1st. of March 1794, by Alexander Philip Wilson, M. D. author of the inquiry above mentioned, and contains not only a vindication of himself, but also some important observations respecting urinary calculi.

“ The occasion which gives birth to the following communication, will apologise, I am convinced, to my fellow Members for my laying before them a paper which can only prove interesting to the person who presents it.

“ Above three years ago I began a set of experiments, in order to determine what circumstances in diet produced that state of the urine which is favourable for the formation of calculous concretions in the

urinary passages. An account of these experiments I intended to have made the subject of my thesis. I found, however, that, with the necessary remarks, they formed a treatise too large for this purpose. Unwilling to have spent so much labour in vain, I published them, with a translation of my thesis on Dyspepsia, immediately after receiving the degree of Doctor of Medicine from the University of Edinburgh, in June 1792.

“ Such were the circumstances which induced me, at a period perhaps too early, to offer my sentiments to the public; and I confess, I was not then aware of what a person who ventures to do so must sometimes encounter. I now stand accused of having extracted the whole substance of my treatise from a pamphlet which I had never seen, and of the contents of which I was perfectly ignorant \*, till after my papers were in the hands

\* I had a conversation, indeed, with a gentleman of my acquaintance about this pamphlet, some time before this date, which was the first time I had heard of it. But whether it be owing to his having given a very indistinct  
account



hands of Dr Monro, Professor of Anatomy and Surgery in the College of Edinburgh. From that pamphlet, I learned but one fact, That the addition of any acid to the urine, after it is out of the body, occasions a precipitation of the lithic acid : and for this fact, I have acknowledged my obligations to the then anonymous author.

“ From the first of my experiments, I observed, that a sudorific diminished, or entirely prevented, the spontaneous deposition of lithic acid from the urine ; which fact, I mentioned to Dr Monro about three years ago.

account of Mr Forbes's pamphlet, (I recollect, that he observed, he had not seen it for a long time), or to my having paid but little attention to his account of it, as I expected soon to see the pamphlet itself, I cannot tell ; but I should scarcely, from any recollection of this conversation, have recognised the work. It is proper to add, that the person here mentioned, did not speak of Mr Forbes's pamphlet, till after I had given him an account of the experiments related in my treatise, and the principal observations which are there made upon them.— [This note is not in the communication which is here extracted from the records of the Medical Society ; which is owing to my not recollecting the circumstance mentioned in it, at the time that communication was read.]

ago. On this, and on the long known tendency, which an acid received into the stomach has, of rendering the precipitation of lithic acid from the urine more copious than usual, (the certainty of which, I also ascertained by repeated trials), was founded every thing (with the exception of the above fact) mentioned in the 4th and 5th chapters of the first part of my treatise, which contain all that has offended Mr Forbes \*.

“ Before I knew this fact, I was rather inclined to think, that the foreign acid received into the body, undergoing certain changes, was itself converted into lithic acid; and that the diaphoretic operated, by throwing this lithic acid out of the body. But, whatever hypothesis we adopt, concerning the manner in which the foreign acid acts in producing the precipitation of the lithic acid, it will be evident to any person who takes the trouble to read these chapters, that the leading opinions contained

\* The 3d chapter also contains some things claimed by this gentleman, but these are repeated in the 4th and 5th.

ed in them, are not in the least affected by it.

“ Of the truth of all that is here asserted, I have some very convincing proofs to offer to the Society. On looking over my papers, I find a manuscript, containing a copy of my treatise, such as it was when Dr Monro first saw it, a long time before I met with Mr Forbes’s pamphlet. From this, I have taken out the two chapters in question, which I shall lay on the table in the library, where they shall ly for a fortnight : and, except in a few instances, in which a trifling alteration was made in the mode of expression, and the opinion above stated, (viz. that the lithic acid is formed from the foreign acid received into the body, and that this lithic acid is thrown off by the skin), mentioned instead of Mr Forbes’s fact ; except (I say) in these instances, this manuscript of the 4th and 5th chapters of my treatise will be found (with the exceptions of three or four sentences, which do not affect the point in question \*) in every respect similar to those published ;

\* I had not then made experiments with mercury ; this medicine, therefore, is not mentioned in the MS.



published ; a copy of which is in the library.

“ About six or eight months before my papers were sent to the press, and while they were in Dr Monro’s hands, I accidentally met with Dr William Russell, (then Mr Russell), a gentleman well known in this Society. He mentioned Mr Forbes’s pamphlet to me ; and asked me, if I had seen it? I told him I had not : and he procured it for me from Mr Thomson, now surgeon in this place. A few days afterwards, I received my manuscript from Dr Monro ; and it was read before the Medical Society, (in the presence of Dr Russell, Mr Thomson, and many gentlemen, who still attend the Society), about a fortnight or three weeks after this conversation, and before I made any alteration upon it, after seeing Mr Forbes’s pamphlet. On account of Mr Forbes and myself differing with regard to the manner in which acids received into the stomach produce a greater than usual deposition of lithic acid from the urine, I wrote a short preface to my paper, mentioning Mr Forbes’s opinion ; which was read on the same night before the Society : on which, Mr  
Thomson,

Thomson, who still frequently attends our meetings, made some remarks, which he also did on my paper in general. Some time after this, I introduced the fact discovered by Mr Forbes into a copy of my essay, which Dr Monro had seen ; and the very one which was read before this Society. I have taken from it the two chapters in question ; and shall, together with the other copy, lay them on the table in the library. The reader will there perceive the pen drawn through the words expressing my own idea, and this fact inserted, as often as it occurs in the course of the chapters, without occasioning any change in the context : so little did the perusal of Mr Forbes's anonymous pamphlet alter the opinions I had formed on this subject \*. As it is of consequence to have it fully proven, that the manuscript which I am speaking of, is the very one which was in Dr Monro's hands, I sent it to Dr Monro, requesting that he would endeavour to  
recollect

\* There is a paragraph omitted here, on account of the principal part of what is contained in it being mentioned in some additional observations at the end of this paper.

recollect whether or not he had seen such a paper, about two years and a half ago; and, whether or not this was the very copy he then saw; which, I mentioned, he might probably recognise, by seeing his handwriting on the 41st page. A few days after, he returned the manuscript, and obliged me with the following note.

“ SIR,

“ I recollect distinctly, that in 1791, I  
 “ read the paper you sent me a few days  
 “ ago; and I observe in pages 41st and  
 “ 54th, corrections of words, which I then  
 “ wrote with a pencil. Your paper is en-  
 “ titled,

“ CHAP. V.

“ The Application of the foregoing Expe-  
 “ riments, to determine the remote cause  
 “ of Gravel.

“ I am, SIR, your most humble servant,

(Signed) “ ALEX. MONRO.

“ *Edinburgh, Feb. 27th 1794.*”

“ For Dr ALEX. WILSON, Physician.”

It



“ It may appear to some gentlemen present, that an attack, so ungenerous as that of Mr Forbes, and couched in such terms, might have been best answered by silence. Such would have been my own opinion, I confess, had what I now write, no other tendency but that of undeceiving Mr Forbes.

(Signed) “ A. P. WILSON.”

What follows is not extracted from the  
Records of the Medical Society.

“ I take this opportunity of mentioning some circumstances, which, on reflection, I think, ought to have been mentioned in the second chapter of my treatise on the urinary gravel. It appears from what is said in this chapter, that the cream-coloured sediment \* is that part of the urine which contains the lithic acid, or from which this acid is formed ; for it is observed in the 89th page, that on adding a certain portion of acid to urine containing much cream-coloured sediment, and

\* It only appears as a sediment when the urine is supersaturated with it ; when its solvent power is increased by heat, the whole is readily redissolved.

and an equal quantity of the same acid to urine containing little or none of it, I always found most lithic acid precipitated from that which had contained most cream-coloured sediment; and likewise, that the more of this it contained, the longer time it required to become limpid, and for the complete deposition of the lithic acid to take place. Besides, where there was a long time required for the deposition of the lithic acid, which always happened where much cream-coloured sediment was present, one could easily perceive the gradual change induced on this last, which altered its colour; and being at the same time precipitated from the urine, was by degrees totally changed into a dark red-coloured sandy-looking matter, lying at the bottom of the vessel \*. This fact being determined, it remained to be investigated, in what manner the foreign acid acts

on

\* In addition to these circumstances, it may be remarked, that wherever I observed much of either of these sediments present in the urine, (much of the cream-coloured sediment, when the perspiration was free, and the diet alkalescent; much of the lithic acid, when the free perspiration was checked, and the diet acescent), I constantly found little or none of the other.



on the cream-coloured sediment in precipitating the lithic acid. An evident objection to supposing the former a neutral salt containing the latter, is the long time which is required for the deposition of the lithic acid, after the foreign acid is added to the urine. Besides this fact, there were others which led me at first to suppose the precipitation of the lithic acid occasioned in a different manner. I thought I had observed the nitrous and vitriolic acids decomposed by the cream-coloured sediment; but the difficulty of procuring a sufficient quantity of this sediment fresh, together with other more necessary occupations which then demanded my attention, prevented me from ascertaining these circumstances with sufficient accuracy. I also found, that when the cream-coloured sediment is exposed to the action of the air, it acquires some of the properties of the lithic acid: it is not after this readily soluble in urine, and the mineral acids produce no effervescence with it, which I always found they did in its recent state. These were only hints leading to experiments which I have never made. They were sufficient,



however, to induce me to believe that the cream-coloured sediment was oxygenated by the foreign acid, and thus converted into the lithic acid. One circumstance, however, strongly combats this opinion. The precipitation of the lithic acid is produced as readily by the common muriatic acid, as by any other. On the other hand, reflecting on the process by which phosphorus is prepared from urine, it appeared more than probable, that much of the cream-coloured sediment enters into its composition; and this circumstance seemed an argument in support of the opinion just stated. In short, I wrote it down, with the arguments which had induced me to form it; and showed the paper, first to Dr Monro, and afterwards to Dr Black. Dr Black thought it extremely improbable that the cream-coloured sediment is capable of decomposing the muriatic acid. I agreed with Dr Black, and even gave up, without making a trial, all hopes of decomposing this acid by means of the cream-coloured sediment of the urine; but, in abandoning the opinion of the lithic acid being produced by the oxygenation of the cream-

cream-coloured sediment, there appeared but one other conjecture which was at all probable, viz. that the cream-coloured sediment is a neutral salt, containing the lithic acid, from which it is precipitated by perhaps every other acid; for even the carbonic acid precipitates lithic acid from the urine. Tired of the subject, and harassed with other business, I went into this opinion, without looking for any more direct proof of it. I have been since convinced, however, that I did so rashly; and am sorry that I have not hitherto found sufficient leisure for endeavouring to determine with certainty, in what manner the deposition of lithic acid, in this instance, is occasioned. In the mean time, the point still remains undecided: but I think, these hints may perhaps prove useful to any person who wishes to pursue this subject.

The chemical experiments just mentioned, and the few contained in the second chapter of my treatise, were made after I saw Mr Forbes's pamphlet. There is nothing mentioned in this chapter which is claimed by Mr Forbes, except the fact for which, in my treatise, I own myself indebted to him.



It is proper, perhaps, to observe, that in making out the extract from the records of the Medical Society, I have, in two or three instances, slightly altered the mode of expression, in order to make my meaning clearer.

\* \* \* \*

A SPECIES of Peruvian bark has of late been much employed in London, which, till the year 1793, has been almost unknown in this country ; but which promises, by the trials made with it, to surpass in efficacy all the others now used for the purposes of medicine. It is known under the title of the Yellow Peruvian bark. It has of late been the subject of an ingenious and valuable publication by Dr John Relph, physician to Guy's Hospital, of which we propose to present an analysis to our readers in our next volume. At present, we shall only observe, that since Dr Relph's publication, this bark, which is readily obtained from the London druggists, has been employed by many practitioners ; and we are happy to learn from different accurate observers, that they have used it with singular success.

IN



\* \* \* \*

IN our 17th volume, an account was given of a new remedy discovered by Dr Roxburgh, in the service of the Honourable East-India Company, and described by him under the title of *Swietenia Febrifuga*. The bark of this tree he has found to be highly serviceable in combating fevers of different kinds, particularly intermittents, in the East-Indies, where Peruvian bark is often very scarce, and to be had only at an exorbitant price. With a portion of this bark, sent to Edinburgh, different chemical trials have been made, and it has been employed in different cases in practice. An account of the result of these experiments and trials, from which there is reason to believe that it will be an important addition to the *Materia Medica*, has been published in an inaugural dissertation at Edinburgh, in which it is treated of under the title of *Swietenia Soymida*. The name of *Soymida*, here employed to distinguish this species of the *Swietenia*, is taken from the appellation by which the tree is known among the natives in India, and is

considered by the author of the dissertation as preferable to that of Febrifuga, because inconvenience has often arisen from denominating vegetables from supposed medical virtues, and because other species of the *Swietenia* may be equally powerful febrifuges with this. Farther trials, both in this country and in the East-Indies, are still wanting for affording sufficient evidence of the medicinal powers of this article; yet what has already been found by experiment and trial, is sufficient to recommend it to the attention of candid practitioners, especially those who are situated in places where the diseases prevail against which it is recommended.

\* \* \* \*

A PLAN has of late been set on foot, patronised by his Royal Highness the Prince of Wales, for the establishment of a General Sea-Bathing Infirmary at Margate. There appears to be a singular propriety in an institution which will extend to the poor the advantages of sea-bathing, which they cannot procure by any other means; and it particularly interests humanity, as helpless children



children will form the principal objects of relief, who, though they might otherwise be burdensome through life, may, by the aid of this establishment, be rendered healthy, strong and useful. The situation of this Infirmary at Margate, will be particularly convenient for the indigent in London who require sea-bathing, as they can have a cheap mode of conveyance to the Hospital by water. We sincerely hope, therefore, that it will meet with the encouragement which it deserves.

\* \* \* \*

DR SANDIFORT of Leyden has for a considerable time been engaged in preparing for publication an important work, under the title of *Museum Anatomicum Academiae Lugduno-Batavæ*. It will consist of two large folio volumes, and will be divided into eight sections, of which the following are the titles. 1<sup>mo</sup>, *Supellex Anatomica Raviana*. 2<sup>do</sup>, *Supellex Anatomica Albiniana*. 3<sup>tio</sup>, *Supellex Anatomica Doevereniana*. 4<sup>to</sup>, *Offa Morbosa*. 5<sup>to</sup>, *Partes Molles Morbosæ*. 6<sup>to</sup>, *Calculi*. 7<sup>mo</sup>, *Monstra*. 8<sup>vo</sup>, *Varia*. This work, which is to be illustrated with



one hundred and thirty-six engravings, can hardly fail to attract the attention of the curious.

\* \* \* \*

A POSTHUMOUS work on the Gravid Uterus, by the late celebrated Dr William Hunter of London, has been for a considerable time in the press at that place, and in all probability will soon be published. The publication is superintended by Dr Hunter's nephew and successor, Dr Mathew Baillie of London, who now teaches anatomy in Windmill Street with very high reputation. There can therefore be no doubt, that it will be presented to the public in a state which will do no discredit to the memory of the deceased author.

\* \* \* \*

ANOTHER posthumous work, by Dr Hunter's brother, the late justly celebrated John Hunter, Esq. whose death we mentioned in our last volume, is likewise in the press at London. The subjects of which it treats are, the Blood, Inflammation, and Gun-shot Wounds. This publication is superintended by Mr Hunter's brother-in-law, and his successor

cessor as Surgeon to St George's Hospital, Everard Home, Esq. already favourably known to the public by several ingenious productions. We trust, therefore, that the publication in which he is now engaged will be no less useful to the public than creditable to the author.

\* \* \* \*

DR THOMAS BEDDOES, formerly Lecturer on Chemistry at Oxford, now at Clifton, in the neighbourhood of Bristol, who is already well known to the philosophical world by several ingenious publications, has circulated a proposal for the establishment of an institution for ascertaining the effects of those powerful agents, Elastic Fluids, in various diseases, and for discovering the best method of procuring and applying them.

That elastic fluids of different kinds, acting on the animal system by means of respiration, have very great influence, no one will deny; and from some late observations by Dr Beddoes and others, it is abundantly proved, that the application of elastic fluids to the cure of diseases is both practicable and promising.



promising. The ascertaining, therefore, with precision how far they may be successfully employed in the alleviation of human misery, is a subject which claims the attention, not merely of the practical physician, but of every philanthropist. We would therefore fain hope, that this laudable investigation will meet with the support and success which it deserves.

Sir Benjamin Hamet, Alexander Anderson, Esquire, and John Grant, Esquire, bankers in London, have undertaken to act as Trustees to the institution, and to dispose of the money subscribed, as a committee, to be appointed by the subscribers, shall direct. Subscriptions are received at the houses of Messrs Coutts and Co., Pybus and Co., Ranson and Co., and several other respectable banking-houses in London. The author of the proposal hopes, that country bankers will take the trouble of transmitting to one or other of the London houses mentioned in his proposals, any sums offered to them for this institution.

\* \* \* \*

A TREATISE on that singular affection of the bones, which the nosological writers have



have distinguished by the title of *Necrosis*, written by Mr James Russell, Surgeon in Edinburgh, has been for some time in the press, and will probably be soon published.

\* \* \* \*

MR JOHN BELL, Surgeon in Edinburgh, who last year published an octavo volume on the Anatomy of the Bones, Muscles, and Joints, has been busily engaged in preparing Engravings for the explanation of that work. These are in so great forwardness, that in all probability they will very soon be published. Mr Bell has drawn his plates with his own hand. He has himself engraved some of these plates, and has etched almost the whole of them. They will, we trust, do him credit, both as an artist and as an anatomist.

\* \* \* \*

THE Observations on the Seats and Causes of Diseases, illustrated by the Dissections of the late Professor Morgagni of Padua, which, we mentioned in a former volume, were preparing for publication by Dr James Hamilton, junior, physician in Edinburgh, have

now

now made very considerable progress, and will, we believe, be put to the press in a short time.

\* \* \* \*

Dr WILLAN'S Treatise on Cutaneous Diseases, illustrated by engravings, which we also mentioned in our last volume, has likewise made considerable progress. We have seen some of the engravings, which to us appear to be executed in a very masterly style.

\* \* \* \*

Dr DARWIN of Derby, who has already distinguished himself not only as an ingenious philosopher, but also as an admirable poet, and who very lately published a large quarto volume, entitled *Zoonomia*, or the Laws of Organic Life, has announced his intention of publishing a second volume, containing a distribution of the diseases, both of mind and body, into four natural classes, with their subsequent orders, genera, and species, their immediate causes, and their methods of cure, together with a new arrangement of the articles of the *Materia Medica*, their qualities, and modes of operation.

THE



\* \* \* \*

The following Deaths of distinguished Medical Practitioners, have lately taken place.

On the 10th of January 1794, in the neighbourhood of London, at the age of 84, Sir Clifton Wintringham, Fellow of the Royal College of Physicians, and of the Royal Society of London, Physician-General to the Army, and Physician in Ordinary to his Majesty. By a liberal education and an intimate acquaintance with the classics, Sir Clifton Wintringham acquired, or rather improved an elegant taste ; by long and attentive practice, as well as by industrious investigation, he obtained great skill and judgment in his profession ; and by different publications he established his reputation as an ingenious and learned writer. He published, 1. An edition of the *Monita et Præcepta Medica* of Dr Mead ; per multis annotationibus et observationibus illustrata. 2. An experimental Inquiry concerning some parts of the Animal Structure. 3. An Inquiry into the Exility of the Vessels of the Human



Human Body. And, 4. Two volumes, entitled, *De Morbis quibusdam Commentarii*. He also published an edition of the works of his father, the late Clifton Wintringham, physician in York, with large additions. Sir Clifton Wintringham's character as a man, was correspondent to his reputation as a physician. In domestic life he was affable and endearing; in conversation polite, lively, and entertaining; and in his friendship steady and affectionate.

On the 20th of January, at London, Dr Francis Biddulph, one of the Physicians of St Bartholomew's Hospital, a young man of the most promising abilities.

On the 26th of January, at London, while prosecuting his medical studies, Mr George Hunter, son to Dr Hunter, physician in York. Mr Hunter was a young man of amiable manners, excellent talents, and uncommon industry.

On the 18th of July, at Gosport, Dr James Lind, who for many years held the office of Physician to Haslar Hospital, with much credit to himself, and benefit to the public. Dr Lind was well known to the  
medical

medical world by his valuable treatise on the Scurvy, his Essay on the Means of Preserving the Health of Seamen in the Royal Navy, his Essay on the Diseases incident to Europeans in Hot Climates, and other valuable publications.

On the 29th of August, at Horncastle in Lincolnshire, where he had practised upwards of fifty years, Dr John Thorold, aged almost 90, a physician of great eminence.

On the 1st of September, at his house in London, Robert Walfh, Esq. Surgeon and Apothecary, a gentleman of great professional eminence, and of an excellent private character.

On the 20th of September, in the 86th year of his age, William Prowting, Esq. Apothecary. He was for many years Treasurer to St Luke's Hospital, an institution of which he had been one of the earliest promoters; and he had the satisfaction to see it rise from a very slender origin, into one of the most extensive and best regulated institutions of its kind in Europe.

On

On the 20th of October, in the 72d year of his age, Mr John Wainman, Surgeon-Apothecary at Skipton in Yorkshire, where he had practised for half a century with great reputation and success.

At Paris, S. J. Sue, Professor of Anatomy at the School of Surgery and the Academy of Painting. He was long a surgeon of the first eminence, and author of several ingenious and valuable productions.

At Paris, Dr P. J. Mauduyt de Varenne, in the 60th year of his age. He was a Member of the Faculty of Medicine, and a distinguished natural historian. He gave very considerable assistance to M. Buffon in compiling his Natural History of Birds, and he wrote the article Ornithology for the new Encyclopedia.

At Heidelberg, Dr Fr. Ph. Overkamp, Professor of Philosophy and Pathology in the University there, and author of several valuable publications.

At Leipzig, in the 77th year of his age, Dr Car. Chr. Krause, Professor of Anatomy and Surgery in the University there, which was much indebted to his labours.

Sir



Sir Lucas Pepys has been appointed Physician-General to his Majesty's Forces, in the room of the late Sir Clifton Wintringham.

Since the publication of our last volume, Dr Angus M'Donald has been admitted a Fellow of the Royal College of Physicians of Edinburgh : Dr Alexander Wilson, and Dr James Buchan, have been admitted Licentiates. And Mr Charles Anderson has been admitted a Member of the Royal College of Surgeons of Edinburgh.

James Glennie, Esq. the Reverend Joseph Dacre Carlyle of Carlisle, and the Reverend John Brougham of Brookhill, in the county of Cavan, have been admitted non-resident Members of the Royal Society of Edinburgh.

\* \* \* \*

State of the Thermometer, Barometer, and Rain, during the year 1793, according to Observations made about a mile from the City of Edinburgh.

MONTH.	THERMOMETER.			BAROMETER.			RAIN.
	High. Deg.	Low. Deg.	Med. Deg.	Highest. Inches.	Lowest. Inches.	Medium Inches.	Inches & Decimals.
Jan.	47	23	40	30.35	28.38	29.75	1.53
Feb.	50	30	43	29.80	28.76	29.45	2.25
Mar.	48	30	40	30.17	28.51	29.36	3.02
Apr.	59	29	44	30.17	29.23	29.68	1.25
May	75	38	54	30.06	28.85	29.52	1.05
June	66	36	56	30.00	29.20	29.55	1.48
July	82	46	61	30.12	29.25	29.64	1.14
Aug.	72	49	61	29.91	29.32	29.54	2.50
Sept.	68	44	57	30.15	29.30	29.65	0.51
Oct.	61	41	49	30.25	28.80	29.63	1.52
Nov.	52	31	43	30.17	29.00	29.47	2.06
Dec.	50	30	41	30.20	28.00	29.67	2.38
Whole Year. }	82	23	49	30.35	28.00	29.57	20.69

State

\* \* \* \*

State of the Thermometer, Barometer, and Rain, during the year 1793, according to Observations made at the Apartments of the Royal Society of London.

MONTH.	THERMOMETER.			BAROMETER.			RAIN.
	High. Deg.	Low. Deg.	Med. Deg.	Highest. Inches.	Lowest. Inches.	Medium Inches.	
Jan.	48	28	37	30.52	28.98	30.16	1.565
Feb.	52	30	42	30.22	29.29	28.80	1.581
Mar.	52	33	41	30.21	29.07	29.84	1.162
Apr.	60	33	45	30.27	29.22	29.89	1.095
May	69	45	54	30.29	29.24	30.04	0.865
June	72	47	59	30.20	29.68	29.96	0.427
July	89	54	68	30.30	29.74	30.03	1.616
Aug.	80	52	63	30.28	29.34	29.95	1.315
Sept.	66	42	55	30.45	29.41	29.98	2.452
Oct.	65	35	54	30.48	29.22	29.98	1.137
Nov.	56	31	45	30.36	29.05	29.80	2.104
Dec.	53	30	42	30.38	28.72	29.74	1.809
Whole Year. }	89	28	50	30.52	28.72	29.93	17.128



## S E C T. IV.

## LIST OF NEW BOOKS.

---

**P**HILOSOPHICAL Transactions of the  
Royal Society of London for 1793.  
4to, London.

Memoirs of the Philosophical Society of  
Manchester. Vol. IV. Part I. 8vo, London.

The Zoology and Botany of New Hol-  
land. By G. Shaw, M. D. & J. E. Smith,  
M. D. No. I. 4to, London.

Indigenous Botany. By Colin Milne.  
8vo, London.

Miller's Synopsis of Mineralogy in Tables  
on Thirteen Sheets. London.

The

The Morbid Anatomy of some of the most important parts of the Human Body. By Matthew Baillie, M. D. F. R. S. Fellow of the Royal College of Physicians, and Physician to St George's Hospital. 8vo, London.

Practical observations on the operation for the Stone. By James Earle, Esq. Surgeon Extraordinary to his Majesty's Household, and Surgeon to St Bartholomew's Hospital. 8vo, London.

Surgical and Physiological Essays. Part II. By J. Abernethy, Professor of Anatomy to the Corporation of Surgeons, and Assistant Surgeon to St Bartholomew's Hospital. 8vo, London.

Essay on the means of preserving and restoring Health in the West Indies. By J. Rollo, M. D. 8vo, London.

The causes of the number of deaths in Fever and Sore Throat. By William Rowley, M. D. 8vo, London.

Popular observations on Apparent Death. By J. Curry, M. D. 8vo, London.

A case of Hydrophobia, commonly called Canine Madness, from the bite of a mad

dog, successfully treated. By Thomas Arnold, M. D. 8vo, London.

A treatise upon the Gravel and upon the Gout, in which their sources and connection are ascertained. By Murray Forbes, Member of the Surgeons Company. 8vo, London.

A letter to Dr Darwin on Pulmonary Consumption. By T. Beddoes, M. D. 8vo, London.

Advice to parents on the management of children in the natural Small-pox. 8vo, London.

Observations on the structure of the Obstetric Forceps. By R. Rawlins, Surgeon, Oxford. 8vo, London.

Chemical Essays. By R. Harrington, M. D. 8vo, London.

Flora Oxoniensis. Auct. J. Sibthorp. 8vo, London.

Botanical Nomenclature. By Dr Gmelin. 8vo, London.

Zoonomia, or the laws of Organic Life. Vol. I. By Erasmus Darwin, M. D. F. R. S. Author of the Botanic Garden. 4to, London.



An inquiry into the nature and properties of Opium. By S. Crumpe, M. D. 8vo, London.

Letters from Dr Withering and others, to Dr Beddoes, on Consumption. 8vo, London.

A treatise on the Croup. By D. Alexander, M. D. 8vo, London.

Medical Observations and Inquiries. By B. Rush, M. D. 8vo, Philadelphia.

A treatise on the Blood. By H. Moises. 8vo, London.

A treatise on the errors and defects of Medical Education. By T. Withers, M. D. 8vo, London.

Medical and Surgical Observations. By Aug. Gott. Richter, M. D. Professor of Medicine in the University of Gottingen, &c. Translated from the German. 8vo, Edinburgh.

A treatise on the diseases of the Hip-Joint, with plates. By E. Ford, M. D. 8vo, London.

An essay on the science of Muscular Motion. By J. Pugh, M. D. with plates. 4to, London.

A treatise on the Hydrocele, on Sarcocele or Cancer, and other diseases of the Testes. By Benjamin Bell, F. R. S. Ed. 8vo, Edinburgh.

Observations on the Venereal Disease. By J. Howard. 8vo, London.

Physiological conjectures on the functions of the human œconomy in the Fœtus and in the Adult. By J. Rymer. 8vo, London.

Observations on human and comparative Parturition. By R. Bland, M. D. 8vo, London.

A translation of the table of Chemical Nomenclature, proposed by De Guyton, formerly De Morveau, Lavoisier, Bertholet, and De Fourcroy, with additions and alterations. 4to, London.

An inquiry into the medical efficacy of a new species of Peruvian Bark, lately imported into this country under the name of the Yellow Bark. By John Relph, M. D. Physician to Guy's Hospital. 8vo, London.

An inquiry into the medicinal qualities and effects of Aerated Alkaline Water, illustrated by experiments and cases. By John Moncrieff, Apothecary, Member of  
the

the Royal Physical Society. 8vo, Edinburgh.

An account of the Bilious Remitting Yellow Fever, as it appeared in the city of Philadelphia in the year 1793. By Benjamin Rush, M. D. Professor of the Institutes and of Clinical Medicine. 8vo, Philadelphia.

A treatise on the Synochus Icteroïdes, or Yellow Fever, as it lately appeared in the city of Philadelphia. By William Currie, M. D. Fellow of the College of Physicians. 8vo, Philadelphia.

Considerations on the medicinal use of Factitious Airs, and on the manner of obtaining them in large quantities. In two parts. Part I. by Thomas Beddoes, M. D. Part II. by James Watt, Esq. 8vo, London.

A dissertation on Simple Fever, or no fever consisting of one paroxysm only. By George Fordyce, M. D. F. R. S. Senior Physician to St Thomas's Hospital. 8vo, London.

A treatise on the Blood, Inflammation, and Gun-shot Wounds. By the late John Hunter, Esq. To which is prefixed, a short account of the Author's Life. By Everard Home,



Home, Surgeon to St George's Hospital.  
4to, London.

J. C. Doltz Neue Versuche und Erfahrungen über einige Pflanzengifte, &c. ; *i. e.* J. C. Doltz's new essays and experiments on some vegetable poisons. Published by J. C. G. Akerman. 8vo, Nuremberg.

Anfangsgrunde de Antiphlogistischen Chemie, &c. ; *i. e.* Elements of antiphlogistic chemistry. By Ch. Girtanner, M. D. 8vo, Berlin.

Ueber die Gexte und Modificationen des Warmestoffes, &c. ; *i. e.* On the laws and modifications of the matter of heat. By J. T. Mayer, Professor of Natural Philosophy. 8vo, Erlang.

Gefammelte nachrichten über den Macassarischen Giffthaum ; *i. e.* A collection of accounts concerning the poison tree of Macassar. By E. W. Martius, Member of the Botanical Society at Ratibon. 8vo, Erlang.

Freymulhige Gedanken über H. Werner's Verbesserungen in der Mineralogie, &c. ; *i. e.* Free thoughts on Werner's improvements

provements in mineralogy. By Abbe Eftmer. 8vo, Vienna.

Ueber H. Werners Verbesserungen in der Mineralogie, &c. ; *i. e.* On Werner's improvements in mineralogy, occasioned by Eftner's Free Thoughts. 8vo, Vienna.

Saggio della Schola Clinica nello Spedale di Padova di Andrea Comparetti, P. P. P. 8vo, Padova.

Riscontri Fifico-Botanici ad ufo Clinico di Andrea Comparetti, P. P. P. nell' Università di Padova. 8vo, Padova.

Prodromo de Fifica Vegetabile di Andrea Comparetti, P. P. P. nell' Università di Padova. 8vo, Padova.

Annali di Chimica ouvero raccolta di Memorie fulle Scienze, Arti, e Manifatture ad effa relativa di L. Brugnatelli, Dottore in Filosofia e Medicina, &c. 8vo, Pavia.

Lettera dell' Abbate Spallanzani al Signor Thouvenel full' elettricità organica e minerale. 8vo, Pavia.

Bibliotêca fisica d'Europa offia raccolta di offervazioni fopra la Fifica, Matematica, Chimica,

Chimica, Storia Naturale, Medicina ed Arti.  
8vo, Pavia.

De Convulsione Cereali Epidemica, novo morbi genere, Facultatis Medicæ Marburgensis responsum: Libellum primum rarum et argumento gravem, recudi curavit, notulisque auxit D. Chr. Goth. Gruner. 8vo, Jenæ.

Jo. Jac. Bernholdi, Phil. Med. et Chir. D. Initia doctrinæ de ossibus ac ligamentis corporis humani, tabulis expressa, cum introductione generali in anatomen universam. 8vo, Norimbergæ.

Tyrolensium, Carynthiorum, Styriorumque Struma, à Josepho Gauteri, M. D. observata et descripta. 8vo, Vindobonæ.

Sciagraphica nervorum capitis descriptio, et quidem Paris 1mi, 2di, 3tii, 4ti, et 5ti, auctore Jacobo Akerman. Paris 6ti, 7mi, 8vi, 9ni, 10mi, et 11mi, auctore Jo. Noræo. 4to, Upsaliæ.

Historia Mercurii et Mercurialium Medica. Scripsit Ernestus Godofredus Baldinger. 8vo, Gottingæ.

Commentatio de quæstione medica, num vires medicamentorum aut sensuum ope, aut  
consideratione



consideratione similitudinis in partibus essentialibus rectius cognoscuntur. Auctore J. D. Herholdt. 8vo, Hauniæ.

Christophori Lud. Hoffmann de sensibilitate et irritabilitate partium libellus. 8vo, Duffeldorpi.

Ideler, Med. Doct. De crisi morborum. Edidit Hebenstreit, Doct. et Prof. Lips. 8vo, Thoruni.

Jo. Andreæ Murray, D. Eq. Ord. Suec. de Wasa, Enumeratio librorum præcipuorum medici argumenti: recudi curavit et permulta additamenta adjecit, Frid. Guil. von Halem, D. 8vo, Aurici.

Jacobi Wernischek, Phil. et Med. D. Medendi norma ad dignoscendas evellendasque ipsas morborum causas. 8vo, Vindobonæ.

Sam. Gott. Vogel, M. D. Prax. Clin. in Univerf. Rostoch, Prof. Pub. Ord. Manuale Praxeos Medicæ: Medicorum illum auspicatorum ufui dicatum. 8vo, Stendaliæ.

Wenceslai Trnka de Krzowitz, M. D. in Reg. Univ. Pestin. Prax. Med. Prof. O. Historia hæmorrhoidum omnis ævi observata medicæ continens. Operis posthumi editionem procuravit

procuravit Franciscus Schraud in eadem Universitati Instit. Med. Prof. P. E. 8vo, Vindobonæ.

Roberti Townson, Soc. Reg. Edin. Soc. &c. Observationes physiologicæ de amphibis. 4to, Goettingæ.

Spicilegium floræ Germanicæ. Auctore Henrico Adolpho Schrader. 8vo, Hannoveræ.

Joannis Adami Schmidt, Chir. Doct. Institut. Chir. in Acad. Cæsar. Reg. Joseph. Prof. P. Extr. Commentarius de nervis lumbalibus eorumque plexu, anatomico-pathologicus. 4to, Vindobonæ.

Fauna Etrusca, sistens insecta quæ in provinciis Florentina et Pisana collegit Petrus Rossius, iterum edita et annotatis plurimis, à Joh. Christ. Lud. Hellwig. Math. et Hist. Nat. Prof. Brunsvic. 8vo, Helmstadii.

Josephi Jacobi Plenck, Consil. Cæs. Reg. Chirur. Doct. Chem. et Bot. Prof. Pub. in Acad. Joseph. Hygrologia corporis humani, sive doctrina chemico-physiologica de humoribus in corpore humano contentis. 8vo, Viennæ.

Joan.

Joan. Nep. Laicharding, S. R. I. E. Nob.  
Manuale botanicum, sistens plantarum Eu-  
ropæarum characteres generum, specierum  
differentias, nec non earum loca natalia.  
8vo, Oenipontæ.

Nomenclator Linnæanus in Elisabeth  
Blackwell Herbarium, nec non index al-  
phabeticus nominum officinalium in usum  
Botanophilorum, à C. G. Groening, J. U. D.  
8vo, Lipsiæ.

Pharmacopœia Austriaco-provincialis e-  
mendata, ad mandatum S. C. R. Apost.  
Majestatis. 8vo, Viennæ.

Jura et privilegia Doctoris Medicinæ diplo-  
mate Patavino expressa et illustrata. Scripsit  
D. Christ. Gott. Gruner. 8vo, Jenæ.

Dulcis mercurii laudes, libellus medicus.  
Auctore D. Georg. Frid. Hildebrandt, Med.  
Prof. Pub. Ord. in Acad. Erlang. 8vo,  
Erlangæ.

Institutiones Therapiæ generalis. Auctore  
Joan. Christ. Gott. Ackermann, M. D. Path.  
et Therap. Prof. Pub. Ord. Altdorfin. 8vo,  
Altdorfii.

Systema Ægritudinum, conditum per no-  
sologiam, pathologiam tam generalem quam  
specialem



specialem et symptomatologiam ætiologiæ  
superstructas, à Christ. Frid. Daniel. 8vo,  
Lipsiæ.

Collectio dissertationum medicarum in  
Academia Gottingensi habitarum. 4to, Got-  
tingæ.

J. P. Franks Prælectiones medicæ de cu-  
randis hominum morbis. 8vo, Manh.

Delineatio systematis nosologici, naturæ  
accomodati, ab Gul. God. Plouquet, Phil.  
et Med. Doct. Tom. 4tuor. 8vo, Tubingæ.

J. J. Plenckii Icones plantarum medicin-  
alium, secundum Syst. Lin. dig. 8vo,  
Tubingæ.

Ferd. Saalmanni Descriptio febrium in-  
termittentium in genere et specierum febris  
intermittentis quotidianæ, quartanæ, et ter-  
tianæ. 4to, Monast.

Mich. Schindleri Commentatio medica,  
sistens observationes circa usum conii macu-  
lati et mali citrei in Scorbuto aliisque morbis.  
4to, Ulmiæ.

DISSERTATIONES MEDICÆ INAUGURALES, quas ex auctoritate Reverendi admodum viri D. Georgii Baird, SS. T. P. Academiae Edinburgenæ Præfecti, nec non amplissimi Senatus Academicæ consensu et nobilissimæ Facultatis Medicæ decreto; pro gradu Doctoris, summisque in Medicina honoribus rite et legitime consequendis, Eruitorum examini subjecerunt, ad diem 24tum Junii 1794.

Gulielmus Bourke, ab Insula St. Croix,  
*De Tetano.*

Edvardus Bourne, Anglus, *De Plantarum Irritabilitate.*

Ambrosius Carter, Jamaicensis, *De Cholera.*

Josephus Antonius de Coutto, Lusitanus,  
*De Partu Humano.*

Alexander Lyon Emerfon, Anglus, *De Pneumonia.*

Hugo Fergusson, A. B. Scotus, *De Phthisi Pulmonali.*

Georgius Fowler, Hibernus, *De Febris Intermittentibus.*

Raphael Gillum, Anglus, *De Febre Puerperarum.*

Georgius Hall, Americanus, *De Diabete.*

Aug. Gul. Harvey, Bermudensis, *De Scarlatina.*

Jacobus S. Kerr, Jamaicensis, *De Hysteria.*  
Perry Eccleston Noel, Marylandinensis,  
*De Angina Tracheali.*

Thomas Sharp, Hibernus, *De Dysenteria.*  
Joannes Stewart, A. B. Hibernus, *De Dy-*  
*senteria.*

Ebenezer Warren, A. B. Hibernus, *De*  
*Podagra.*

Jacobus Woodford, Anglus, *De Resusci-*  
*tatione Submersorum.*

DISSERTATIONES MEDICÆ EDINBURGE-  
NÆ, ad diem 12mum Septembris 1794.

Thomas Bell, Hibernus, *De Pneumonia.*

Franciscus Rigby Brodbelt, Jamaicensis,  
*De Bronchocele.*

Josephus Mafon Carpenter, Britannus,  
*De Dysenteria.*

Andreas Duncan, A. M. Scoto-Britannus,  
*De Swietenia Soymida.*

Georgius Fogerty, Hibernus, *De Hydrope*  
*Anasarca.*

Reeves Fowler, Scoto-Britannus, *De Ab-*  
*sorptione.*

Gulielmus



Gulielmus Jackson, ex Insula St Vincentii,  
*De Phthisi Pulmonali.*

Joannes Johnston, Hibernus, *De Hydro-*  
*thorace.*

Robertus Kennedy, Scotus, *De Asthmate.*

Hugo Macpherson, A. M. Scoto-Britan-  
nus, *De Dyspepsia.*

Michael Parker, Hibernus, *De Variola.*

Randal Jacobus Slacke, Hibernus, *De*  
*Ascite Abdominali.*

Robertus Wilson, A. M. Carolinensis Me-  
ridionalis, *De Cholera.*



# I N D E X.

A	Page
AKUSERUNEE, account of its powers in ophthalmia - - -	367
Alkaline aerated water, inquiry into its medicinal qualities - - -	105
Animal electricity, experiments on -	38
Arabian method of curing fractures - -	292
Arnold, Thomas, M. D. case of hydrophobia	74
Arrowawk Indians, account of their specific in ophthalmia - - -	367

## B

Baillie, Dr Mathew, morbid anatomy -	115
Beddoes, Dr Thomas, proposal for a pneumatic institution - - -	429
Bell, Mr John, anatomical plates - -	411
Benfell, Dr G., case of hydrophobia -	170
Bartram, Moses, M. D., account of the trismus nascentium - - -	165
Bidulph, Dr Francis, death of -	414
Bignonia ophthalmica, account of its powers in inflammations of the eyes -	367
----- botanical description of	367
Bile,	



	Page
Bile, anomalous symptoms from	298
Bile, treatise on	51
Biliary calculi, nature of	59
Bishoprick, Robert, case of cancer	257
Blood, singular solution of	33

## C

Calculi, observations on the nature of	127
Cancer-like case cured by antimonial pills	257
Canine madness, marks of in dogs	90
Capelle, Dr Jos., observations on tænia	139
Cathral, Dr J., account of dissections in the yellow fever of Philadelphia	359
Chisholm, Dr, account of a specific in ophthalmia	365
Clarkson, William, M. B., case of tetanus	139
Currie, Dr William, case of hydrocephalus internus	173

## D

Darwin, Dr E., zoonomia	412
Dermato-pathologia, practical observations on	95
Dolbeare, Thomas, case of curvature of the spine	135
Duffield, Ben., M. D., case of inverted uterus	155

## E

Eaton, Mr, account of the Arabian method of curing fractured limbs	292
--	-----

Elastic

## Page

Elastic fluids, proposed institution for determining their effects in diseases - - -	409
Ellis, Mr William, history of a tetanic affection terminating favourably - - -	341

## F

Fæces, retention of, from stricture of the intestines	28
Fowler, Dr Thomas, effects of a solution of arsenic in remittent fever - - -	337
Fractured limbs, Arabian method of curing -	292

## G

Guthrie, Dr Mathew, observations on hen-blind- ness - - -	284
--	-----

## H

Hamilton, Dr James, observations on the seats and causes of diseases - - -	411
Heart, diseased appearances of - - -	117
Hen-blindness, observations on - - -	284
Humpage, Ben., physiological researches -	175
Hunter, Dr William, posthumous work on the gravid uterus - - -	408
Hunter, John, Esq., posthumous work on the blood - - -	408
Hunter, Mr George, death of - - -	414
Hydrophobia, case of, terminating successfully	74

Intermittents,

## I

Intermittents, effects of compression by the tourniquet in	271
--	-----

## J

Jackson, S. H., M. D., observations on the diseases of the skin	95
---	----

## K

Kellie, Mr George, effects of compression by the tourniquet in intermittents	271
Krause, Dr Car. Ch., death of	416
Kuritscha flepota, observations on	284

## L

Lead, pernicious effects from	313
Leib, Dr M., case of hydrocephalus internus	135
Liver, treatise on	51
Lind, Dr James, death of	415

## M

Martyn, Dr O., anomalous symptoms from bile	298
Mather, Mr A., effects of an over dose of the terra ponderosa muriata	265
Mauduyt, Dr P. J., death of	416
Moncrieff,	



	Page
Moncrieff, John, inquiry into the medicinal qualities of alkaline aerated water - - -	105
Monro, Alexander, M. D., experiments on animal electricity - - -	38
Morbid anatomy, by Dr M. Baillie - - -	115

## N

Necrosis, treatise on - - -	411
Nervous fever, observations on - - -	16
Nevin, Dr William, history of a case of a puer cœruleatus - - -	325

## O

Overkamp, Dr Fr. Ph., death of - - -	416
--------------------------------------	-----

## P

Pearson, George, M. D., effects of variolous contagion - - -	213
Percival, Mr Thomas, discourse on hospital duties	375
Pericardium, diseased appearances of - - -	117
Philadelphia, transactions of the College of Physicians of - - -	134
Philadelphia, yellow fever of - - -	344
Physick, Dr P., account of dissections in the yellow fever of Philadelphia - - -	359
Phthisis pulmonalis, practical observations on - - -	168
Pregnant women, effects of variolous contagion on	213

	Page
Prowting, William, Esq., death of	415
Puer cœruleatus, history of a case of	325

## R

Rait, Mr W., singular case in midwifery	319
Reil, Jo. Chr., Med. et Chir. Doct., memorabilia clinica	16
Relph, Dr John, account of the yellow Peruvian bark	404
Remittent fever, effects of a solution of arsenic in	337
Richter, Aug. Got., M. D., medical and surgical observations	197
Ruffel, Mr James, treatise on necrosis	411
Rush, Dr B., letter respecting the yellow fever of Philadelphia	358
————— account of tetanus	136
————— account of a bitter prepared from the root of the liriodendron tulipifera	158

## S

Sandifort, Dr, account of the museum anatomicum at Leyden	497
Saunders, William, M. D., treatise on the liver	51
Sea-bathing infirmary at Margate, account of	406
Senter, Isaac, M. D., case of ischuria	143
————— case of retroversio uteri	151
————— practical observations on phthisis pulmonalis	168
Skin, practical observations on the diseases of	95
Stewart,	

	Page
Stewart, Mr Charles, account of a periodical discharge of blood from the urethra -	332
Stockett, Mr Thomas, case of headach from a worm in the nose - - -	157
Stomach, diseased appearances of -	120
Sue, Dr S. J., death of - - -	416
Swietenia Soymida, account of -	405

## T

Terra ponderosa muriata, effects of an over dose of	265
Thorold, Dr John, death of - -	415
Tourniquet, effects of compression by, in intermittents	271

## U

Urethra, periodical discharge of blood from -	332
---	-----

## V

Variolous contagion, effects of -	213
-----------------------------------	-----

## W

Walsh, Mr Robert, death of -	415
Wainman, Mr John, death of - -	416
Weather, register of, at Edinburgh -	418
----- at London - -	419
Willan, Dr J., treatise on cutaneous diseases -	412

Wilson,



	Page
Wilson, Dr Alexander, observations on calculous concretions - - -	391
Wintringham, Sir Clifton, death of - -	413

## Y

Yellow fever of Philadelphia, appearances on dissec- tion - - -	359
Yellow fever of Philadelphia, observations on	344
Yellow Peruvian bark, account of - .	404

## F I N I S.











# REQUESTS:

(please use block capitals and press hard)

AUTHOR (or other heading)

~~Historical documents~~

Title:

NEEDLE CEMENTORIES

No. of  
Volumes

18 all

Date of Publication

1780-95

Pre-1851 books  
Size (eg. 8vo)

8vo

Journals

vol., pt., pages

Copy No.

1

Collection/Sequence

EARLY PRINTED  
BOOKS / SERIALS

Shelfmark/Book No./MS. No.

REC0 / 5(4)

PLEASE GIVE DETAILS OF TWO COPIES WHERE POSSIBLE

READER'S NAME IN BLOCK LETTERS + SIGNATURE

FA NEEDLE CEMENTORIES

Date

30/6/2000

Library use only:

FOUND

☐

STACK LOCATION:

117 D / 5 & 6



